What Works Now?

A review and update of research evidence relevant to offender rehabilitation practices within the Department of Corrections

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Headline Conclusions – “What Works Now?”

- The effectiveness of correctional rehabilitation continues to be confirmed through a wealth of published outcome studies.
- Offender risk assessment remains both a valid and valuable procedure in supporting good offender management; a range of new risk assessment tools allows for better targeting of offenders with services.
- Psychologically-based programmes continue to demonstrate robust outcomes in offender rehabilitation.
- Good outcomes are being widely achieved through educational and employment training; provision of education and employment in conjunction with other forms of correctional rehabilitation is likely to bring about the best results.
- Reintegrative services (social supports to released prisoners) can also improve outcomes for offenders who have participated in other forms of rehabilitation, but delivered in isolation these services appear to have limited impact.
- Further evidence is required to validate the effectiveness of culture and faith-based services.
- While poor programme outcomes continue to be reported, these are usually a result of inadequacies in how services are delivered; of particular importance is competence and skill in correctional rehabilitation facilitators.
- The general principle of ensuring a comprehensive approach to rehabilitation, with a range of services addressing the individual’s functioning across all key areas of their life – psychological, educational, employment and social circumstances – is strongly supported.

Executive Summary

A substantial body of research evidence, known as the “What Works” literature, was influential in the design of the Department’s current sentence management framework. This literature revolved around a number of key principles of correctional rehabilitation which, if adhered to in the design and delivery of services, would reliably lead to reduced rates of re-offending. The principles of effective correctional rehabilitation can be divided into three major domains, namely risk, targets and “responsivity”.

It is now more than ten years since the main features of the existing sentence management framework were adopted. The current review examines new research published over the last decade that relates to these three domains. In doing so, the approach taken was not limited to publications directly aligned with the “what works” paradigm; the goal was to consider all new evidence which related to effective correctional rehabilitation.

The main findings of the review are presented below under the headings relating to each of the three main domain areas.
In relation to risk assessment, the current review concludes that knowledge of an offender’s relative likelihood of recidivism remains valuable in supporting effective correctional treatment. Evidence confirming the accuracy and utility of a variety of risk assessment tools has continued to accumulate. Structured risk prediction tools have been adopted in countries around the world, and are in use in a range of ways to assist efficient offender management.

The utility of risk data has been demonstrated in serving both incapacitative and rehabilitative goals. With respect to the latter, the principle that treatment should be targeted at medium- and high-risk offenders, rather than low-risk offenders, has continued to receive empirical support.

Risk prediction tools have proliferated, and principles for their optimal use have become clearer. For the general offender population, research suggests that risk tools should be clearly structured to assess static (stable, enduring) risk factors or both static and dynamic (more changeable) factors. Accurate estimations of risk can also be produced by tools that guide clinical judgement. Assessing acute (highly changeable) factors can also provide guidance about whether offending may be imminent.

More recently, innovations have included risk assessment tools that are specific to certain types of offending, especially violent and sexual recidivism, and these specialised risk assessment tools have been proven to be more accurate than generic risk tools. Similarly, more accurate estimations of risk can be produced when specific tools are used for youth offenders and to assess psychopathic offenders.

Finally, there is now some evidence suggesting that assessment of positive characteristics in an offender’s life (skills, strengths and social resources) are relevant to risk of re-offending, and should be included in an overall risk assessment.

The current review adopts the term “target” to refer to those aspects of the offender’s personality, lifestyle or circumstances which, if effectively remedied in some way, lead to positive (reduced re-offending) outcomes. The term replaces the previous “criminogenic need” concept, which is no longer as widely accepted.

From an examination of published outcome studies, the following personal characteristics continue to show value as a focus for correctional intervention:

- anti-social attitudes and beliefs
- anti-social peer associations
- deviant sexual interests
- substance abuse and dependency
- poor self-management and problem-solving skills
- familial conflict and dysfunction
- psychiatric disorders
- education and employment related deficits.
A great deal of published research in the last decade has confirmed low self-control as being central to the propensity to commit crime. As such this construct is confirmed as having great importance as a focus for treatment effort.

At this stage it remains unclear whether violence propensity *per se* should be classified as a target, as recent evidence has produced equivocal findings. Violence appears multifaceted with a wide range of contributory causes and, on this basis, taking a broad therapeutic approach is advocated.

Prior to 1998 (the time around which the Department’s sentence management approach was being formulated), education and employment-related activity were regarded largely as valuable “time-fillers” for prisoners, as the evidence for their utility in reducing re-offending was relatively slim. However, in the last ten years a range of robust studies has accumulated showing positive outcomes achieved as a result of targeting offenders with educational and employment-related training.

Less compelling evidence has been produced to support the simple targeting of reintegrative concerns (e.g., ensuring that released prisoners’ accommodation, employment and social support issues were addressed), although this type of activity has been shown to be of benefit when provided in support of rehabilitation programmes.

Offending committed by different sub-groups is now better understood as having different etiologies and offence pathways. Consequently, targeting of characteristics that are specific to such sub-groups is supported. This research has had particular implications for the tailoring of treatment content directed at child-sex offenders and rapists. It is also recognised that the valid targets identified above are also effective targets in youth and female offenders. Psychiatric difficulties, relationship and family issues, and histories of victimisation have particular relevance for women. For youth, reducing the influence of anti-social peers, and engaging family and wider social network personnel as influences of change have strong validity.

“Target” refers to the specific focus for an intervention; responsivity refers to the *manner or style* in which an intervention is delivered. Recent research largely confirms much of what was already accepted ten years ago, but some new developments have arisen.

Cognitive-behavioural therapy (CBT), involving techniques such as cognitive restructuring and social skills training, remains a “treatment of choice” in the correctional setting. However, the following theoretical approaches to treatment (some of which also incorporate CBT techniques) are also showing considerable promise:

- Strengths-based approaches
- Dialectic Behavioural Therapy
- Moral Reconciliation Therapy
- Purely motivational interventions
- Therapeutic Community approaches
- Indigenous culture-based services.
Faith-based interventions with offenders have expanded rapidly in many countries over the last ten years. However, at this point there is no conclusive evidence that such approaches can be effective.

With respect to the style of delivery, achieving positive outcomes means that correctional interventions need to conform to the following principles:

- match the intensity of the programme or service (duration, number of sessions, amount of direct contact with programme personnel) to the risk profile of the offender
- have a high degree of integrity, including:
  - basing the programme on a coherent theory of criminal behaviour
  - having manuals detailing content and procedures
  - having appropriately selected staff
  - monitoring of both the staff delivering the programme and individual offenders’ progress
  - high levels of support for staff
  - ensuring a high proportion of participants complete the programme
- be congruent with the cultural backgrounds of participants (use of language, concepts, imagery, etc)
- be tailored to suit the specific learning styles of participants (e.g., an interactive and multi-dimensional approach to youth treatment, and taking a structured, repetitive behavioural approach for offenders with lower intellectual functioning)
- where programmes are delivered in an institutional setting, include an “aftercare” phase in the community.

Intervention programmes have proven effective when delivered in a group setting. Evidence suggests that programmes may be more effective when delivered to offenders in the community rather than custodial environments; however this could reflect differences (such as the relative risk of offenders) in the community and custodial populations. Programmes in which offenders are mandated to attend have been shown to achieve positive outcomes.

The following staff characteristics have been associated with good outcomes in correctional rehabilitation programmes:

- interpersonal manners characterised by empathy, respect, warmth, confidence and persuasiveness
- staff members who are aware of their own biases and preconceptions
- qualifications and training in a relevant professional discipline such as clinical psychology.

In summary, the main conclusion to be drawn from the current review is that the core principles adopted to underpin the original design of the Department’s sentence management framework in the late 1990s are validated by recent research.

New developments have occurred, and this Department’s own research has led the way in several areas. Opportunities exist for the Department to improve its procedures and approaches, and range of services, to rehabilitation. However, the Department can have confidence that the fundamental shift that occurred ten years
ago, in adopting certain rehabilitative principles, remains both sound and rational as the basis for effective offender rehabilitation.
Introduction and Overview

Reducing recidivism amongst offenders has been a core organisational objective of the Department of Corrections since its inception.

Over the course of the 1990s a number of Departmental personnel were monitoring a growing body of international research on correctional rehabilitation. This body of research, known as the “what works” literature, indicated that offenders could be successfully rehabilitated if certain principles were observed in the delivery of services.

In 1995 an internal Departmental paper was circulated which summarised the main findings of this research (McLaren, 1995). This, along with other concurrent processes and events, triggered interest in a comprehensive re-development of the offender management processes in use at that time.

The “what works” literature had three major (though inter-related) sub-domains of research activity. These were:

- risk: this referred to consistent findings that the relative likelihood of re-offending by offenders could be reliably predicted. This assessed level of risk was held to be an important consideration in determining how an individual offender was managed and, in particular, their suitability for inclusion in core rehabilitative programmes
- need: this referred to a defined set of offender characteristics which were relevant targets for intervention; targeting characteristics that were not part of this set was held to be unproductive in reducing recidivism
- responsivity: this concept referred to the desirability of ensuring that offenders were properly prepared to participate in rehabilitation, and that rehabilitative interventions were delivered in a manner that matched participants’ ability to learn.

Starting around 1998, a project involving representatives from Departmental groups and services, and contracted advisers, was launched with the express purpose of designing a new offender management process. Broad agreement existed at the time that principles derived from the “what works” literature should guide development of core elements of the offender management framework under development.

The Integrated Offender Management (IOM) project continued for a number of years, concluding in 2002. By then, extensive developmental work had been completed on offender assessment processes, eligibility rules for referral to rehabilitative programmes, the design of those programmes, and links to other offender management procedures. Comprehensive sentence management manuals guiding the daily practice of both Corrections Officers in prisons, and Probation Officers in the community, were produced. While much of the content of these manuals related to practical and legal aspects of managing offenders, a good deal of the content was directly informed by the “what works” literature.
In the ten years since “what works” principles were incorporated into offender management, a number of modifications to the framework have been made. Some of these were in response to practical difficulties that emerged over the period, while others were in direct response to internally generated research that pointed to problems with current practice. However, in the main, current offender management practices have remained largely unchanged over the decade, and reflect the state of professional knowledge that had developed up to 1998.

This paper reviews research findings that have accumulated in the ensuing ten years within each of the three sub-domains of the “what works” literature. The ultimate purpose of the review is to ensure that our current offender management practices are as closely aligned as possible to “what is now known to work”.

The paper is divided into three main sections. Each section summarises the state of research knowledge in the sub-domain by the late 1990s. Secondly, an outline is given of the offender management principles which the Department adopted, guided by this knowledge. The section then reviews the major research findings relating to the domain over the last ten years. Where relevant the section concludes with commentary on potential implications of findings for current practice.

In approaching this task, the scope of the research considered has been defined only by relevance to effectiveness in achieving correctional rehabilitation outcomes. This obviously includes literature which sits comfortably within the on-going “what works” paradigm, but attention has also been paid to research from a range of sources.

Although not reported here in detail, undertaken as part of the current review was a summary-level analysis of relevant outcome studies published in the years 1999 - 2009. This was undertaken as a means of determining the extent to which published outcome studies in the last ten years were favourable in terms of correctional rehabilitative effectiveness. A total of 465 separate papers were located. Of these, 280 reported statistical information on the outcome of a specific correctional rehabilitative intervention in terms of re-arrest, reconviction or imprisonment, or changes in frequency and seriousness of offending. The programmes included both prison and community-based services, programmes targeted at adult and youth offenders, males and females, sex, violent, drug-affected, mentally ill and general offenders, programmes ranging from standard cognitive-behavioural approaches through to therapeutic communities and faith-based approaches, and interventions which promoted cognitive, educational, employment, general life skills or reintegrative outcomes. Not included were studies which investigated outcomes from different sentencing policies or other forms of sanctioning, or physical health-type interventions.

This summary analysis revealed that more than two-thirds of the published papers (71%) reported positive outcomes. Of the remainder, 24 percent found no clear

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1 It is acknowledged that bias towards positive outcomes being submitted and accepted for publication occurs in any such review.
effect, and a small number (5%) found that programme participants fared worse than the comparison group or standard.

Two conclusions can be drawn from this. Firstly, it is reasonable to infer that continued confidence in correctional rehabilitation is justified. Secondly however, success in such endeavours cannot be assumed simply on the basis of having good intentions. Rehabilitative interventions with offenders can and do sometimes fail; it appears possible that offenders can even be worse off as a result of such experiences.

Ensuring that our rehabilitation services have the best chance of success is the main objective of the current review. Fortunately, the research literature considered in the review sheds a great deal of light on strategies to ensure that positive outcomes are indeed achieved.
Section 1: Offender Risk

State of Knowledge to 1998

By 1998, the available research evidence pointed to three major conclusions in the area of offender assessment. These were:

- that probability of future criminal behaviour could be accurately quantified
- that structured risk assessment methods were more accurate in predicting re-offending than unstructured "clinical" approaches
- that information on individual offenders’ risk level has practical utility for offender management decision-making.

With respect to the first and second points, evidence supporting the accuracy of structured risk assessment had been accumulating throughout the 1980s and 1990s. Commonly used within “static” or actuarial risk assessment tools were the following variables (Andrews & Bonta, 1994):

- sex
- current age
- age at first conviction
- total number of prior convictions
- number of previous sentences of imprisonment
- nature and seriousness of offence(s)
- total time spent in prison.

A wide range of studies had been published which demonstrated that risk scores, assessed on the basis of static variables such as those listed above, correlated very highly with subsequent reconviction and re-imprisonment².

An obvious advantage of utilising the kinds of variables listed above was that risk assessment could be automated and carried out on large groups of offenders. By 1998, and prior to the advent of the IOM project, robust automated systems of risk assessment were in use by correctional services in several countries, including New Zealand.

Measures of likelihood of future offending conferred the following benefits:

- guiding sentencing decisions (i.e., use of incapacitation becomes more selective)
- guiding release-on-parole decisions (both whether to release and the amount of rehabilitative input, monitoring and controls needed if released)
- enabling the targeting of resources towards those most likely to re-offend and, conversely, avoiding wastage of resources on those unlikely to re-offend

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² For a recent review of the history of such measures, see Andrews, D., Bonta, J. & Wormith, S. (2006). The recent past and near future or risk and / or need assessment, Crime and Delinquency, 52, 7-27.
• improving the validity of outcome information relating to the effectiveness of programmes and services (i.e., by providing baseline rates of expected re-offending).

By the mid-1990s, a number of studies had also been published which indicated that risk could be assessed reasonably accurately by means of structured tools that also evaluated “dynamic” factors. By this was meant more changeable characteristics such as behaviour patterns and relationship and employment status. The Canadian “Level of Service Inventory” (LSI) was the best-known example of a dynamic risk assessment tool, although it incorporated both static and dynamic variables. The dynamic variables were:

• antisocial attitude/orientation
• antisocial companions
• alcohol/drug abuse
• financial problems
• family/marital difficulties
• accommodation need
• absence of pro-social leisure/recreation pursuits.

Studies published throughout the 1980s and 1990s confirmed that the Level of Service Inventory - Revised (LSI-R) performed well at predicting general recidivism (Andrews & Bonta, 1998). Its main advantage over simple static measures is that it identifies targets for change which can then be addressed in order to reduce risk, something that actuarial measures do not do. However, the disadvantage is that assessments using this tool required reasonably in-depth individualised assessments of offenders, which can be time-consuming and expensive.

By the late 1990s the consensus on risk assessment appeared to favour actuarial assessment to identify higher-risk target groups. These offenders could then be subjected to more in-depth assessment individually, to identify suitable rehabilitative targets.

Evidence had also accumulated that supported use of offender risk ratings in determining whether offenders should receive treatment. In brief, the evidence indicated that treating higher-risk offenders (assuming programmes of adequate quality) could result in measurable reductions in recidivism, whereas the same treatments provided to low-risk offenders had no effect (Baird et al, 1979; Andrews et al, 1987; Andrews et al, 1990) (some studies claimed to show that the latter practice could result in increased re-offending rates). Further, where rates of re-offending are low amongst both treated and comparison offenders, it became difficult to show any significant difference in subsequent re-offending rates, to reflect treatment intervention effects. The absence of such findings in turn made it harder to justify expenditure on rehabilitating such low risk offenders.

3 A number of possible explanations have been proposed for these findings: these include changes to low-risk offenders’ self-perceptions as a result of being dealt with as a “serious” criminal, as might be predicted by labelling theory, or the development of associations and networks with higher-risk offenders through participating in programme activities. See Fo, W. & O’Donnell, C. (1975). The buddy system: The effect of community intervention on delinquent offences. Behaviour Therapy, 6, 522-524.
How New Zealand Used the Knowledge about Risk

The RoC*Rol tool

As noted above, a static risk assessment tool was already available for use at the time that the IOM project commenced. The Risk of Re-conviction and Risk of Re-imprisonment (RoC*Rol) tool was developed by Psychological Services personnel, based on the criminal histories of 133,000 male and female convicted offenders. RoC*Rol produces a score between zero and one that indicates the likelihood that an offender will be both reconvicted in the future and be sentenced to a term of imprisonment for that offence. A RoC*Rol score is generated largely from the individual's criminal history data. RoC*Rol encoding within the Department's offender database, allowing scores to be automatically generated for all offenders at the time of sentence commencement, and updated at subsequent points in time as required.

Risk information was utilised within the sentence management framework in a number of ways. These included the following:

Sentencing and parole hearings: Commentary on offenders’ risk level (based on RoC*Rol scores) has been included in pre-sentence reports provided to judges at sentencing, and in reports to the Parole Board.

Sentence management categorisation: Risk scores generated by RoC*Rol in part determined the sentence management category to which an offender was assigned. These categories were developed as a kind of shorthand for signifying offender eligibility for various programmes and services. Major rehabilitation programmes were initially available only to offenders with risk scores above 0.50, although this was subsequently lowered when it became apparent that the higher threshold was unduly restricting rates of referral to programmes.

Recognising that an offender’s officially recorded criminal history does not always reflect the true extent of actual offending (and thus future risk), “professional override” was also available to staff if other information existed to suggest high risks posed by an offender.

To a lesser extent and perhaps less rigidly enforced, risk scores also had significance for placement in employment and educational activities in prison, and reintegrative services. However, over time the business rules relating to employment, education and reintegration were relaxed to permit almost all sentenced offenders access.


The following material addresses the question of whether research evidence accumulating since 1998 continues to support, or to challenge, the principles relating to risk assessment noted above.
**Principle 1: “Probability of future criminal behaviour can be quantified”**

A steady stream of published research reports in the last ten years provide mounting support for the accuracy of structured risk assessment procedures with offenders. These relate to a wide range of measures in use internationally (see Andrews et al, 2006 for a summary of numerous recent studies). Here in New Zealand, RoC*RoI has demonstrated excellent predictive power in terms of both reconviction and re-imprisonment. A recent 48-months follow-up study (Nadesu, 2008) involving 5,000 prisoners released between April 2002 and March 2003 showed very high levels of correlation between risk score and rate of return to prison (offenders’ risk scores were calculated at the time of their 2002/03 release). The degree of correlation between risk scores and actual re-imprisonment is remarkable by any standards, and provides powerful validation of the RoC*RoI tool.

![Figure 2. Re-imprisonment rate by ROC*ROI decile band (at 12, 24, 36 & 48 months follow-up). Prison releases between 01 Apr 2002 and 31 Mar 2003](image)

As a result of the demonstrated accuracy of such methods, actuarial risk assessment tools are now in use operationally in correctional settings throughout the world:

**Australia** – Actuarial assessment has been widely utilised in Australia, although different states have adopted different risk assessment tools. The LSI-R is quite commonly used and is the primary assessment tool used in Australian Capital Territory. Queensland authorities developed a risk/need assessment tool called the Offender Risk-Needs Inventory, now widely used throughout that state as well as South Australia and the Northern Territories. Other specialised tools such as the Psychopathy Check List –Revised (PCL-R) and the Static 99, are also administered in many Australian correctional settings.
**North America** – Risk assessment is widely used throughout North America (Bonta et al, 2004). Tools in use include:

- The Statistical Information for Recidivism (SIR) Scale
- The PCL-R
- The Static 99,
- The STABLE 2007
- The ACUTE 2007
- The Violence Risk Scale (VRS)
- The Salient Factor Score (SFS)
- The LSI-R, and the screening version of the LSI-R
- The Minnesota Sex Offender Screening Tool.

**The UK** – Since 1996, England and Wales have used a risk tool called the Offender Group Reconviction Score (OGRS). Based on criminal history characteristics, the most recent version also includes sanctions which fall short of an official conviction and sentence, such as reprimands and final warnings. These practices render the tool more accurate for young offenders who are more likely to receive these responses. In Scotland, the LSI-R and the Risk Assessment Guidance Framework (RAGF) are both in use. The RAGF is a structured clinical judgement tool which means it combines actuarial measures and clinical opinion to estimate whether an offender has a high, medium or low risk of future offending.

Actuarial tools are also utilised specifically to determine sexual or violent offending. To assess the likelihood of sexual recidivism, tools such as the Sex Offender Risk Appraisal Guide (SORAG), the Sexual Violence Risk – 20, the Static 99 and the MATRIX 2000 are used. The risk of violent recidivism is estimated thought the application of a variety of tools including the Violence Risk Appraisal Guide (VRAG), the PCL-R and the Spousal Assault Risk Assessment (SARA).

**New Zealand** – New Zealand has also adopted a number of actuarial assessment tools. To assess psychopathy, the PCL-R and a screening version (PCL-SV) are administered by Departmental psychologists. To assess sex offenders, psychologists and probation officers use the STABLE 2007 and ACUTE 2007, and psychologists use the Automated Sexual Recidivism Scale (ASRS) and the Static 99.

**Principle 2: “Structured risk assessment outperforms clinical judgement”**

Evidence produced over the last ten years has continued to confirm the superiority of structured risk assessments over unstructured clinical judgement (see Hanson & Morton-Bourgon, 2007 and Grove et al, 2000). New research however has suggested that structured clinical judgement can enable meaningful conclusions to be drawn while avoiding the inaccuracies of clinical judgement (Douglas et al, 1999). Structured clinical judgement requires evaluators to assess offenders against selected variables and reach a final conclusion on risk by either counting up items from a checklist, and/or by expressing a clinical judgement. Recent advocates argue that there is no substitute for obtaining a thorough understanding of an offender’s background, psychological status and current situation in evaluating any increase in risk of violence or other serious offending. Mullen (2006) for example
argues that structured clinical judgement integrates the experience and knowledge of a professional with actuarial evidence. Mullen particularly values the use of structured clinical judgement in predicting the likelihood of violent behaviour by mentally ill offenders.

A number of structured guides have been developed that consider specific items and suggest methods of calculating risk. Three tools that have been quite widely implemented across the criminal justice sector include the Historical, Clinical, Risk-20 (HCR-20) (Webster et al, 1997), the Sexual Violence Risk-20 (SVR-20) (Boer et al, 1997) and the Structured Anchored Clinical Judgement (SACJ) (Grubin, 1998).

Dutch researchers claimed that the SVR-20 most accurately predicted sexual recidivism, out-performing the commonly-used Static 99, although the study had a small sample size and the results showed variability (De Vogel et al, 2004). The utility of the SACJ and the HCR-20 is also being shown (Craig et al, 2004; Hansen & Thornton, 2000 and Douglas et al, 2005). Andrews and Bonta (2006), while acknowledging that structured clinical judgment is an improvement to unguided clinical judgment, have however expressed concern about the re-emergence of interest in clinical judgement, arguing that it (inappropriately) allows professionals to apply their judgement in idiosyncratic ways.

**Principle 3: “Reserve intervention for higher-risk offenders”**

Two recent studies have been published indicating that correctional rehabilitation programmes can produce adverse outcomes if not targeted according to the risk principle. Lowenkamp and Latessa (2005) found reductions in recidivism were reliably achieved for high-risk offenders, but that low-risk offenders were slightly more likely to re-offend after participating in intensive psychologically-based treatment programmes. Smith and Gendreau (2008) also found, across a range of programme types, that recidivism outcomes for low-risk offenders were worse as a consequence. These findings tend to suggest that targeting high-risk offenders with programmes remains an important principle of effective correctional treatment.

Palmer et al (2007) found no evidence that treatment makes low risk offenders worse, simply that these offenders re-offended at the same rates expected of low risk offenders. This finding was also supported by a separate study which found that low risk offenders did not have improved reconviction outcomes after attending medium-intensity treatment (Palmer et al, 2009). This suggests that treatment for low risk offenders is an inefficient use of resources. On the other hand, the second study also found that highest-risk offenders (in this case, those scoring above 75% or higher on the OGRS) participating in cognitive skills-type programmes were much less likely to complete programmes once they had started. The tendency to not commence programmes to which they had been referred was even more pronounced.

These findings relate specifically to intensive psychologically-based correctional programmes. No research has been identified that addresses the question of whether other forms of rehabilitative activity, such as employment, education or reintegration-focused services, have potentially adverse effects on recidivism when applied with lower-risk offenders.
Developments in Offender Risk Assessment

The offender risk assessment domain has seen a wide range of research-based developments over the last ten years. These have centred on a number of key objectives:

- assessment of risk for specific types of offences
- assessment of risk amongst distinct sub-groups of offenders
- assessment of acute risk (as opposed to enduring or stable risk)
- "strengths-based" risk assessment.

Significant developments under each heading are discussed below. Taken as a whole, findings generally suggest that accuracy of risk prediction is enhanced when both static and dynamic factors are used to estimate risk. Developments in this area also reflect a growing interest in ensuring that risk assessment tools meaningfully link with a coherent theory of criminal offending: that is, the individual elements which make up an assessment tool should be derived from an empirically valid understanding of why people commit crime, and those factors that serve effectively to increase or diminish the probability of further crime.

Assessment of Risk for Specific Offence Types

The last ten years have seen a great deal of research exploring whether specific types of offending can be predicted with accuracy. The main area of interest here has been in improving the accuracy of predictive assessments for sexual and violent offending. This arises from recognition that these outcomes are usually of considerably greater public concern than recidivism of other types (e.g., property, drug or traffic offending), and have greater significance for correctional decision-making such as whether to release on parole.

For sexual offences in particular, there are high levels of attrition at every stage of the criminal justice process, from the victim’s decision to report a crime, the Police’s apprehension of the offender, and then at the subsequent stages of prosecution and conviction. This means that officially recorded criminal records of these offenders are frequently unrepresentative of their history of actual offending. Consequently, assessment of sex offenders presents particular challenges.

Effort therefore has been directed at developing risk assessment tools which tap into offender variables correlated to this type of offence. This has led to the incorporation of variables into sex offence risk assessment tools such as the following:

- antisocial personality
- early onset of problematic sexual behaviour
- deviant sexual interests and preferences
- diverse types of sex crimes
- victims who are unrelated, male or strangers
• denial of offending (if offending is intra-familial)
• history of dropping out of rehabilitation programmes.

Prediction of violent re-offending has been improved by incorporating offence-relevant variables such as the following:

• a history of aggressive interpersonal behaviour
• antisocial or psychopathic personality disorder
• offences involving use of weapons
• situational proximity or access to potential victims.

Over the last ten years it has also been recognised that risk tools designed to estimate the risk of violent recidivism also perform well at predicting general recidivism (for example see Wong & Gordon, 2006 and Loza & Loza-Fanous, 2001). This suggests that many of the factors implicated for violent offending are also linked to non-violent offending.

Important developments in predicting sexual and violent recidivism include the Violence Risk Appraisal Guide (VRAG) and Sex Offender Risk Appraisal Guide (SORAG), static-type tools developed over the last ten years by Canadian researchers. These tools have each demonstrated good accuracy in predicting violent and sexual recidivism (Quinsey et al, 2006). Further, recent enhancements to the LSI-R (now known as the Level of Service/Case Management Inventory (LS/CMI) have led to improved prediction of violent re-offending. The STATIC-99 tool has also been developed and is used to assess the likelihood of sexual recidivism in adult males (Hanson & Thornton, 1999). A revised version, the Static 2002, is currently in use.

New Zealand has also developed the ASRS, which is a validated actuarial measure of sex offender risk based on New Zealand data. Research is also underway in New Zealand, involving the Department’s Psychological Services staff, on an actuarial tool for violent offenders. The intention for the Automated Violence Recidivism Scale (AVRS) is that it will generate risk assessment scores electronically from an offender’s criminal history (Skelton, 2008). Additionally, the Department is currently undertaking research on the utility of the Violence Risk Scale.

Assessment of Risk Amongst Distinct Sub-Groups of Offenders

Youth offenders

As noted above, actuarial risk assessment methods make extensive use of official criminal history data to determine individual risk ratings. This makes such approaches less useful with youth offenders, as much of their prior offending, if known at all, is likely to have been dealt with outside of the formal justice system. Therefore, enhancing accuracy of risk prediction in youth has required the development of a number of specific risk tools. Early police contact, and extent of known offending remain highly relevant, but youth assessment tools also tend to focus on events and processes in childhood and early adolescence. These events include diagnoses of attention deficit, conduct and oppositional defiant disorder, school expulsion, association with delinquent peers, and substance abuse.
Assessment measures in common use internationally include the Youth Level of Service/Case Management Inventory (YLS/CMI) (Hoge et al, 2002) and the Psychopathy Check List: Youth Version (PCL:YV) (Forth et al, 2003).

Here, Departmental staff have been actively involved in the development of risk assessment tools for youth offenders. The Department’s Policy Group and Psychological Services staff cooperated around 2001-02 to develop the “Involvement in Trajectory to Adult Crime” (ITAC) screening tool. This tool formed the basis of the Youth Offending Risk Screening Tool (YORST) which has recently been adopted by NZ Police and Child, Youth and Family as a routine screening process. YORST involves 14 questions about a youth offender, on subjects such as their criminal records, peers, education, employment, family life, and alcohol and drug use. Its use, it is hoped, will improve decision-making and allow for a more targeted approach to the roots of youth offending.

Female offenders

Prediction of re-offending by females also poses some challenges because, relative to males, female offenders typically re-offend at lower rates, commit less serious crimes and have shorter criminal careers than their male counterparts (King, 2004). Evidence has been produced to show that many risk prediction factors are the same for male and female offenders (Moth & Hudson, 1999), and that generic risk assessment tools can be equally accurate for female offenders (Rettinger, 1998; Lowenkamp et al, 2001). In New Zealand, the RoC*Roi tool has also proved to be accurate for female offenders (Nadesu, 2009). Nevertheless, research investigating risk specifically for female offenders reflects an expectation that accuracy of risk prediction tools for women could be enhanced if gender-specific issues were incorporated (King, 2004). At this stage no formal tool for use with women has been produced, but research has focused on characteristics understood to feature strongly with recidivistic women. These include:

- self-harming / suicide attempts (see Blanchette, 2001)
- physical abuse as an adult (Moth & Hudson, 1999)
- drug abuse (Lewis, 2006)
- psychiatric and personality disorders (Lewis, 2006).

Psychopaths

The concept of psychopathy is now widely accepted as meaningful and valid, signifying a stable and enduring personality type characterised by various antisocial traits. These include egocentricity, irresponsibility, shallow emotions, lack of empathy, guilt or remorse, pathological lying, manipulativeness, and the persistent violation of social norms and expectations (Wong & Hare 2005). As such, psychopathy has been demonstrated repeatedly to be a potent risk factor for offending and re-offending. At the moment, it is largely unchallenged that the “measure of choice”, is the PCL-R (Hare, 1991; a screening version, the PCL-SV, is also available). Scores on the PCL-R have been shown to correlate highly with general and violent recidivism (Hemphill et al, 2004). Assessment of psychopathy tends to be used in addition to more generic risk assessment procedures, with
elevated scores on both signifying particularly high risks of future serious offending. In New Zealand, extensive research has been conducted using the PCL-SV, allowing New Zealand norms to be established for the tool.

Recent New Zealand research has begun to suggest that intelligence may moderate the risk of recidivism in psychopathic offenders. Beggs and Grace (2008) identified that offenders with relatively low levels of intelligence and high psychopathy scores (as measured by the PCL-R), were more than four times as likely to be reconvicted of a sexual offence than other offenders. As no corresponding interaction was found between intelligence and actuarial risk, it is suggested the association is specific to psychopathy.

**Dynamic Assessment of Risk**

Variation arises not only between offenders in terms of their enduring risk level, but also variation *over time* within individual offenders. Research has focused therefore on improving assessment so as to detect short-term escalations in the level of risk presented by an individual offender. This is particularly useful for staff charged with managing offenders – for example, probation officers - to determine whether re-offending may be imminent.

As noted above, dynamic risk factors are offender characteristics that are related to risk but are potentially changeable (Andrews & Bonta, 2006). These factors can be further categorised as stable or acute (Hanson & Harris, 2000).

**Stable dynamic risk**

Stable dynamic risk factors are more durable, tending to persist over months or years, and include characteristics such as substance dependence, antisocial attitudes and low self control.

**Acute dynamic risk**

Acute dynamic risk factors are changes to the person’s functioning that occur over days or even hours. Examples might include the breakdown in a relationship, sudden loss of accommodation or employment, and alcohol intoxication.

Research investigating the role dynamic variables play in influencing risk include work by Hansen and Harris (2000), who generated evidence for a temporal link between acute dynamic factors and recidivism (i.e., increases in intensity of variables such as anger and subjective distress were recorded just prior to offending by recidivists). This indicates that close monitoring of such indicators could enable periods of heightened risk to be identified and addressed to prevent offending. Other recent research supports the conclusion that dynamic factors are significantly related to offending outcomes, and that including them in an assessment adds to the overall accuracy of risk assessments across a range of offender groups (Mailloux, 2008).
Dynamic risk tools

Risk tools that measure dynamic risk have also been produced. The VRS uses static and dynamic variables to assess violence and to predict an offender’s level of risk. The VRS can also be used to guide treatment as the tool identifies relevant treatment targets as well as assesses an offender’s treatment readiness and change (Wong & Gordon, 2006). Studies have indicated that the original VRS and a subsequent version, the VRS-2, are valid measures of violence risk (Dolan & Fullam, 2007; Wong & Gordon, 2006). A sex offender version of the VRS has also been developed called the Violence Risk Scale – Sexual Offender Version (VRS-SO). The VRS-SO rating scale has been established to assess risk and to predict sexual recidivism. The VRS-SO also measures treatment change and informs the delivery of treatment (Olver et al, 2007). Both the VRS and the VRS-SO are used by psychologists in the Department of Corrections, with further research currently being undertaken using the VRS.

In 2000, a stable and acute actuarial tool called the Sex Offender Needs Assessment Rating (SONAR) was developed by Hansen & Harris (2000b). The SONAR has subsequently been adapted into two scales, the STABLE 2000 and the ACUTE 2000. The STABLE 2000 and the ACUTE 2000 have also been superseded by the STABLE 2007 and the ACUTE 2007 (Hanson et al, 2007). New Zealand is one of a limited number of countries that already have trainers accredited to train staff in the use of these tools.

“Strengths-Based” Risk Assessment

Current thinking on risk assessment suggests a need to include, not just characteristics that increase the likelihood of re-offending but also, consideration of “protective” factors that reduce risk. Protective factors can be conceptualised as aspects of the offender’s personality, social situation or current circumstances that create psychological, motivational or circumstantial barriers to relapse into offending.

Protective factors, which are now being incorporated into a number of recently-developed risk assessment tools (Andrews et al, 2004), can be broadly grouped into three categories:

- psychological characteristics (such as higher IQ, emotional resiliency, flexibility, a positive outlook on one’s future)
- adequate social skills
- supportive social relationships.

Brown (2003) was one of the first researchers to generate evidence supporting the value in identifying an offender’s dynamic strengths. Measurable improvements on dynamic factors such as an offender’s coping ability, or the formation of social support bonds were significantly predictive of the time elapsed before an offender’s parole was revoked or the offender faced new criminal charges. More recently, Ward, Mann and Gannon (2007) and Serin and Mailloux (2008) have published evidence emphasising that protective factors and resiliency are relevant to the process of desistance from crime.
**Theory-based risk assessment**

Risk assessment tools have also been developed based on theoretical models of criminality and offending, where variables in the assessment tool are selected for their explanatory power as to why recidivism becomes more or less likely. The contrast between simple actuarial approaches can be illustrated by the fact that several previous periods of imprisonment is highly predictive of re-offending, but says nothing about what has driven that re-offending pattern. On the other hand, knowing that the individual has severe drug dependence problems, is highly impulsive and holds strongly pro-criminal beliefs not only assists in identifying the person as higher-risk of re-offending, but in part explains how and why re-offending might occur.

Examples of theory-based tools include the LS/CMI (Andrews *et al.*, 2004) and the SVR-20 (Boer *et al.*, 1997). Dynamic risk measures (such as the VRS, the VRS:S0, the STABLE and the ACUTE) are also based on theory and research, so could be viewed as theory-based tools. A very recent innovation that combines elements of several of the above conceptual dimensions is Serin and Mailloux’s Dynamic Risk Assessment for Offender Re-entry (DRAOR; 2008). This research tool is intended to assist staff managing offenders to locate clients on the pathway to desistance from crime. Desistance is viewed as a process that is advanced when critical internal and external variables align to reduce the likelihood of further criminal activity (Serin & Lloyd, 2009). The assessment requires the assessor to answer a set of 20 questions relating to stable and acute dynamic variables, and protective factors. The Department’s Psychological Services are currently undertaking a multi-year research project to establish the validity and reliability of the DRAOR with New Zealand offenders, and explore its utility in assisting probation officers to make better-informed decisions in managing offenders (e.g., when to initiate recall of a parolee).

**Current and Emerging Issues with Offender Risk Assessment**

A number of issues of interest or concern exist with offender risk assessment, and are briefly discussed here.

**Group data and the individual**

There can be a tendency for staff using risk data to overlook the fact that a risk score is based on group data, and cannot be used to conclude definitively that an individual offender under discussion will or will not re-offend. Scores are in fact numeric probabilities, and though an offender may be in a group that has an average 80 percent probability of being re-imprisoned, there is no way of knowing whether he or she is one of the 20 percent of offenders with similar scores who do not go on to be re-imprisoned.

**The need to update base data**

Actuarial tools such as RoC*RoI are based on criminal history data that may have been accumulated many years previously. Such data can become out-of-date as a result of social, policing and sentencing changes over time. Users of such tools
therefore need to periodically update the raw data sets upon which they are based, to ensure on-going validity.

**Circularity effects**

Problems can potentially emerge with actuarial risk data when such information is provided to key players in the criminal justice process such as sentencing judges and Parole Boards. For example, an offender assessed as high risk may, on the strength of this information, be given a harsher sentence than might otherwise apply. This sentencing information in turn further inflates the individual’s risk score, which can then lead to on-going circular effects if subsequently reconvicted. This effect can have potentially pernicious “amplifying” effects on certain sub-populations of offenders (such as Maori) whose rates of re-offending are above-average.

**Risk assessment based on genetic/heritable factors**

The phenomenon of intergenerational transfer of criminality is well-established (Farrington, 2003). Recent advances in understanding the influence of genetic factors on behaviour have included a great deal of new knowledge about the heritability of criminality (Smith & Farrington, 2004). Genetics appear to play a role in the intergenerational transfer of crime. At this time, risk prediction using genetic markers does not appear to have been formally implemented anywhere in the world, but such developments can be predicted with reasonable certainty.

**Summary**

The utility of risk data has been demonstrated in serving both incapacitative and rehabilitative goals. With respect to the latter, the principle that treatment should be targeted at medium- and high-risk offenders, rather than low-risk offenders, has continued to receive empirical support.

Risk prediction tools have proliferated and principles for their optimal use have become clearer. For the general offender population, research suggests that risk tools should be clearly structured to assess static (stable, enduring) risk factors or both static and dynamic (more changeable) factors. Accurate estimations of risk can also be produced by tools that guide clinical judgement. Assessing acute (highly changeable) factors can also provide guidance about whether offending may be imminent.

More recently, innovations have included risk assessment tools that are specific to certain types of offending, especially violent and sexual recidivism, and these specialised risk assessment tools have been proven to be more accurate than generic risk tools. Similarly, more accurate estimations of risk can be produced when specific tools are used for youth offenders and to assess psychopathic offenders.

Finally, there is now some evidence suggesting that assessment of positive characteristics in an offender’s life (skills, strengths and social resources) can affect the risk of re-offending, and should be included in an overall risk assessment.
Section 2: Intervention Targets

State of Knowledge to 1998

One of the most important messages of the correctional “what works” literature was that, in order to be effective, programmes have to target “the right things”. The history of offender rehabilitation is littered with failed attempts and, it was argued, the main reason for that failure was interventions addressing characteristics of offenders only tangentially related to offending behaviour (Andrews, 1995). For programmes to “work”, targeting had to be of offender characteristics or circumstances that were directly relevant to risks of future offending. These critical characteristics were dubbed “criminogenic needs”.

The main criminogenic needs, claimed as having reliable evidence for their utility as intervention targets, included the following (Andrews, 1995):

- anti-social attitudes and beliefs
- anti-social peer associations
- violence propensity
- deviant sexual interests
- substance abuse and dependency
- poor self-management and problem-solving skills
- familial conflict and dysfunction.
- psychiatric disorders.

The kinds of programme focus identified as poor or inappropriate targets for correctional interventions included the following:

- low self-esteem
- emotional distress and “unhappiness”
- “insight” and self-awareness
- providing support to/increasing cohesion of antisocial peer groups
- improving neighbourhood-wide living conditions.

In the main, the “what works” literature emphasised the addressing of intra-personal, particularly psychological issues, and a good deal less the social and practical circumstances of offenders. This resulted in a preference for intensive psychologically-orientated programmes, and a relative lack of interest in academic or vocational training, or practical assistance for released prisoners. This de-emphasis was justified by research findings that suggested relatively minor effect sizes from these kinds of interventions (for example, Garrett, 1985). Where positive effects were found, these tended to be dismissed as methodological “artefacts” arising from educational and vocational programmes being directed at generally lower-risk and more highly motivated offenders (Bushway & Reuter, 1997). There was also an expectation that addressing core cognitive and behavioural problems would generalise outwards to improved functioning in other areas of offenders’ lives.
How New Zealand Used Knowledge about Intervention Targets

Assessment

The “what works” approach to appropriate targeting-for-intervention led directly to the development here of an assessment tool to identify offenders' major “needs”. The Criminogenic Needs Inventory (CNI) was developed by Departmental staff for use in routine offender assessments. The expectation was that the specific needs that an offender presented would be identified, enabling the person to be referred to a programme or programmes which specifically addressed those needs. The CNI was piloted and found to have high test-retest reliability (82.7%), and good correlation with comparable instruments such as the LSI-R, and the Wisconsin Risk/Needs Assessment Instrument. The pilot study also generated data to suggest that not all expected criminogenic needs were indeed present in the New Zealand offender population, resulting in two elements - gambling and low self control - being removed from the instrument. Given subsequent research findings, it is likely however that these needs were not found in the participants due to detection issues.

An important innovation of the Department's adoption of “what works” thinking into sentence management processes was an attempt to examine culturally-specific elements of offenders' presentations, particularly in relation to Māori culture. The CNI developers were concerned that “what works” thinking, being based on western psychological perspectives, might not adequately capture unique characteristics of Māori offenders (Coebergh et al., 2001). Consequently, in a somewhat pioneering initiative, an additional set of questions and prompts for interviewer enquiry were included in the CNI, which explored particular issues of Māori offenders that were believed to be relevant to their rehabilitation.

Finally, the sentence management framework incorporated checklist-style assessments of educational, employment and reintegrative status and deficits.

Interventions

At the same time as the CNI was being produced, new cognitive-behavioural programmes were being designed for implementation. These were low-to-medium intensity programmes (100 hours duration, delivered over ten weeks), with variant forms focusing on violence, driving offending and substance abuse, and a generic form that was suitable for offenders who did not present with the first three characteristics. Already in place was a programme targeting “cognitive skills” (Straight Thinking), and a small number of highly intensive special treatment unit programmes for sex offenders and violent offenders.

Predominantly, these programmes were designed to be “offence-focussed”, meaning that a significant proportion of the programme was directed towards participants thinking about, and applying new perspectives to, their usual patterns of criminal conduct – in other words, understanding and changing attitudes and beliefs that serve to maintain offending behaviour. Other critical elements common to most of these programmes were:

- developing the capacity to take the victim’s perspective
- emotional regulation skills
- interpersonal skills
- problem-solving skills
- lifestyle planning to prevent relapse.

Sex offender treatment programmes also included content that was directed at reducing the strength of deviant sexual desires.

Prisoners would continue to have access to a range of educational and employment activities and opportunities. However, relative to the major cognitive-behavioural treatment (CBT) interventions, these were treated as a lower priority in sentence planning, especially for higher-risk offenders.


**Assessment**

Though “criminogenic need” was a very widely used term in the correctional rehabilitation literature up to the early 2000s, there are objections to the use of the term. Critics have disliked the jargonistic tone and the sense conveyed that criminal conduct can be understood as reflecting some kind of legitimate human need. This report uses the term “targets” to denote characteristics of offenders that, if adequately addressed through some form of intervention, reliably decrease offending rates.

To assess whether targets for interventions identified in pre-1998 research are still valid and appropriate, published correctional rehabilitation outcome studies (both primary research and summary review papers) of the last ten years were examined. The primary purpose of this exercise was to assess whether successful outcomes were being reported from programmes which addressed either specific targets, or a combination of recognised targets. It is recognised that many correctional programmes focus on a wide range of offender characteristics, and it is entirely possible that favourable outcomes reflect the utility of addressing some, but not all, of the characteristics addressed by an individual programme approach. More sophisticated research will be necessary to tease out this kind of subtlety.

**Targets**

Overall, research evidence generated in the last ten years continues to support a majority of the intervention targets identified over the years to 1998. From current research, it is reasonably clear that interventions targeting the characteristics listed above (p. 25) can still bring about significant reductions in rates of re-offending.

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4 See [http://www.telegraph.co.uk/news/uknews/3269520/Jack-Straw-driven-nuts-by-his-own-jargon.html](http://www.telegraph.co.uk/news/uknews/3269520/Jack-Straw-driven-nuts-by-his-own-jargon.html) “Singling out the phrase ‘criminogenic needs of offenders’ as one of the worst examples of ‘impenetrable jargon’, (UK Justice Secretary) Jack Straw said that (he) profoundly disagrees that we should describe someone’s amoral desire to go thieving as a ‘need’ equivalent to that of victims or the law-abiding public”.
This however is not to suggest that having programme content targeting such characteristics automatically guarantees success. A number of other programme features appear to be necessary to achieve this (discussed in the third section of this paper). Further, some evaluations of programmes that are ostensibly directed towards “appropriate” targets continue to reveal poor outcomes (see Section 4).

Violence propensity

A possible question mark over previously validated targets relates to the concept of “violence propensity”. The problem with the construct seems to be that it is overly broad and general, with little explanatory power (“the person was violent – therefore he must have a violence propensity”). In reality a multitude of individual traits and deficits are predictive of violent behaviour (Howells & Day, 2002). Violence prevention programmes that are achieving promising results are targeting factors such as anti-social attitudes and beliefs, poor problem solving skills, relationship and communication skills, and low self control (Cortoni et al, 2006; Polaschek et al, 2005). It is also suggested that some violent offenders could fall into particular sub-types, such as men who specialise in family violence. Some characteristics undoubtedly heighten the risk of violence amongst offenders, though the same characteristics may be functionally related to other forms of offending also (Polaschek & Collie, 2004).

Recent research has produced equivocal findings around the targeting of “violence” amongst repeatedly violent offenders. There have been a number of studies that suggest addressing anger (e.g., by teaching anger control skills) is not effective with many violent offenders (for example see Loza & Loza-Fanous, 1999). It is yet to be fully determined whether distinct programmes are necessary for different sub-types (Wilson & Wales, 2008). On this basis, some researchers believe that violence prevention programmes should have a broad range of therapeutic targets (Howells & Day, 2002; Dowden & Andrews, 2000). This is consistent with the approach taken in the redesigned Medium Intensity Rehabilitative Programme and the Special Treatment Unit Rehabilitative Programme delivered to New Zealand offenders. Unfortunately, and despite the importance of violence as a target for change, few programmes targeting violence in adult offenders have been evaluated in Western jurisdictions (Serin et al, 2009; Polaschek & Collie, 2004). For this reason, the Department’s Violence Prevention Unit at Rimutaka Prison is an important and pioneering initiative.

The appropriate approach to rehabilitation for domestic violence offenders has been hotly contested over the last ten years. For decades the prevailing view was that these programmes should centre primarily on gender roles and power imbalance between males and females. However, recent research evidence tends to suggest that targeting such issues is largely ineffective (Bowen et al, 2008; Aos et al, 2006). Evidence instead now seems to favour the view that the risk-needs approach is equally applicable to domestic violence offenders (McMurran and Gilchrist, 2008). In particular, intimate partner violence is a function of psychological factors (attachment difficulties, personality disorder, shame-proneness and trauma), and that CBT-style programmes addressing these issues are effective in reducing domestic violence recidivism (Dutton, 1997; Dutton, 2007), as are approaches that address common characteristics such as alcohol abuse and anger.
Self-control

One particular target for which supportive research evidence has multiplied in the last ten years is low self-control. Gottfredson and Hirschi’s (1990) book “A General Theory of Crime” first presented the idea that deficient self-control is central to understanding criminality. They argued that people with low self-control tend to be impulsive and excitement-seeking, are easily frustrated and unable to persevere with tasks, and have a “here-and-now” approach to life. Gottfredson and Hirschi locate the origins of self-control largely in child-rearing practices, although very recent research suggests that self-control is to an extent “hard-wired” (Beaver et al, 2008).

A very large volume of evidence has been produced over the last ten years confirming self-control to be a reliably measured construct, and that low levels of self-control are predictive of involvement in crime (for example Pratt & Cullen, 2000; DeLisi & Vaughn, 2008). This research has also generated empirical support for the validity of the concept across gender, country of origin and race/ethnicity. This research evidence confirms the importance of rehabilitative emphasis on teaching self-control strategies to offenders: these include emotional self-regulation skills, problem-solving skills and relapse prevention techniques.

Culture-based targets

The Department’s efforts to identify culture-specific needs of offenders (using the MaCRN assessment) was based on speculation that cultural characteristics unique to Māori offenders might play a role both in understanding their offending, and in enhancing their rehabilitation. This venture was not a success, and for a range of reasons the MaCRN assessment was discontinued. It remains an open question of whether an understanding of offending behaviour at an individual level would be enhanced through investigation of culturally-specific factors. Research reports specifically addressing this question have not yet been identified in the international literature, although many studies have found unusually high rates of crime and delinquency within particular communities (e.g., Weatherburn & Lind, 2001).

Targeting of education and employment-related deficits

As noted above, by 1998 the level of research support for the targeting of education and employment-related deficits was not compelling. Despite the fact that such activities were widely available to prisoners in almost all countries, the evidence for impacts on re-offending initially appeared to be quite weak, and it was often argued that criminal attitudes and beliefs (such as lack of motivation towards employment) needed to be the primary focus (Bushway & Reuter, 2001).

At a theoretical level, the rationale for improving the employability of offenders is reasonably compelling. A number of critical links in this "logic chain" are well-established by research:

- offenders who attend corrections-based education have higher rates of employment following release (Wilson et al, 2000; Hull, 2000)
- having stable employment is generally associated with lower rates of re-offending (Laub & Sampson, 2001; Finn, 1998; Rossman & Roman, 2003)
offenders who participate in corrections-based education programmes have higher (post-release) earnings than non-participants (Steurer et al, 2001) and higher wages are associated with lower rates of criminal activity (Bernstein & Houston, 2000; Western & Petite, 2000).

A critical principle of education is that educational services must be of a high standard, both in terms of curriculum as well as in terms of competent delivery to achieve positive outcomes (Alton-Lee, 2003). In the correctional setting, this means that the course content must be relevant to the offender and his/her future employment prospects, and course material must be well-designed and delivered by competent educators.

New evidence for offender education programmes

Over the past decade, a small number of research reports have appeared addressing the question of whether the provision of school-type education to offenders can have measurable impacts on recidivism. More significantly, there have appeared a number of literature reviews of older evidence (studies conducted between 1980 and 2001) which shed a more positive light on the value of this form of intervention.

Important review articles and primary research papers are summarised here.

- A review of 33 comparison group-style evaluations of correctional educational and vocational programmes found that, overall, participants were employed at a higher rate than non-participants, and that rates of reconviction were lower. Interestingly, reductions in recidivism were found to be greater for educational programmes than for employment programmes (Wilson et al, 2000).
- A review of 16 separate studies involving 13 distinct educational programmes (the latest completed in 2001) assessed the quality of the research, and undertook significance testing of results. The review concluded that the weight of evidence "supported the effectiveness of correctional education programmes in reducing recidivism" (MacKenzie, 2006).
- A US study involved over 3000 prisoners released from 1979 to 1994, whose records were examined to assess the extent to which involvement in educational programmes had impacts on recidivism. Academic completers were found to have been re-incarcerated at a significantly lower rate than offenders with no educational involvement (19% re-incarcerated compared to 49%) and those who enrolled in an academic course but failed to complete it (38%). Vocational completers were also re-incarcerated at rates lower than those who had no involvement (21% compared to 49%) and those offenders who did not complete the programme (37%) (Hull et al, 2000).
- A large-scale study in the US involved 3600 prisoners across three different states who had undertaken educational courses of varying length and intensity. This study sought to address weaknesses of previous studies by using a treatment and comparison group, using statistical controls, addressing possible self-selection bias, using more than one measure of recidivism, and using a relatively long follow-up period (offenders were followed up over three years after release). A seven percent reduction in the rate of re-imprisonment was
found (23.2% re-imprisoned, vs. 30.3% of matched controls) (Steurer et al, 2001).

- An Australian report examined links between prisoners' participation in “vocational education and training” (VET) programmes available within the Queensland prison system and their rates of return to prison. The findings reveal that being involved in VET before release decreased the rate of return to prison from 32 percent to 23 percent (Callan & Gardner, 2005).

- The influential Washington State Institute for Public Policy meta-analytic study, published in October 2006, examined 17 studies on “general education” for offenders, and calculated an effect size of 0.07, which equates to reduction in recidivism of seven percent (Aos et al, 2006).

Also relevant here are the conclusions of Lipsey and his colleagues in a recent review of research findings on standard CBT programmes for offenders. Lipsey concluded that effects of such programmes appeared “significantly greater” when participants had also been exposed to a range of other rehabilitative services. Examples of services noted as enhancing the effect sizes of CBT programmes included educational programmes, as well as employment-related training (Lipsey, 2007-6).

Relevant to this discussion is the growing body of evidence on the pervasiveness of poor literacy and numeracy in the offender population, and especially amongst prisoners. The Department of Corrections has identified that up to 90 percent of all prisoners may have low literacy skills compared with approximately 43 percent of the general population, and up to 80 percent of all prisoners may have low numeracy skills compared with 51 percent of the general population (Department of Corrections, 2009). One post-1998 study was located that specifically evaluated a literacy-related intervention with prisoners. Findings suggested that “graduates” displayed increased reading ability but rates of recidivism no lower than matched controls (Vito & Tewksbury, 1999). The intervention was relatively brief (six weeks duration), which may partly explain the lack of impact.

**Employment programmes**

Evidence for the effectiveness of correctional employment programmes in reducing recidivism has also accumulated in the last ten years. As with education, the research findings contain a proportion of reports where no differences were found. However, major reviews of relevant studies tend to conclude both that participants in corrections-based employment programmes obtain higher levels of post-release employment compared to non-participants (Wilson et al, 2000), and have lower recidivism rates (Laub & Sampson, 2001; Finn, 1998; Rossman & Roman, 2003).

Review articles and primary research papers for employment interventions are summarised here.

- The review by MacKenzie (2006), which was discussed above in relation to education, also surveyed 26 distinct comparison-group studies of outcomes  

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5 A low level of literacy or numeracy skill is defined as being at level 1 or 2 of the International Adult Literacy and Numeracy Scale and is below the level of skill needed to participate fully in a modern complex society.
from employment programmes. This review concluded that employment programmes significantly reduce recidivism, with an average eleven percent reduction in recidivism generated as a result of programme participation. Employment programmes were also found to be associated with significantly better employment rates of participants after release from prison.

- The 2006 Washington State study (Aos et al 2006), also referred to above, examined outcomes from eight studies of “correctional industries” and “vocational education” and calculated effect sizes of 0.06 and 0.09 respectively in terms of “crime outcomes” (equating to falls in re-conviction / re-imprisonment rates of six and nine percentage points).

- A recent US Department of Justice review by Smith et al (2006) was a nationwide empirical assessment of the post-release employment status and recidivism impacts of prisoners who participated in an initiative known as the Prison Industries Enhancement Certification Program (PIECP). The post-release progress of graduates was compared to prisoners who had participated in non-certified prison work placements, and those not involved in any employment activities. The study involved three matched samples involving a total of almost 6500 prisoners and 46 prisons across five states, with releases occurring between 1996 and 2001. The report concluded that PIECP participants had more successful employment outcomes, and returned to prison less frequently, than comparison prisoners. PIECP graduates also had longer survival times before re-arrest.

As already noted, the review conducted by Lipsey et al (2007-6) concluded that the effectiveness of CBT-style interventions was enhanced when participants had opportunity to engage in employment-related training.

**Reintegration**

The tendency for many offenders to be re-imprisoned within months or even weeks after release from prison is widely recognised (Social Exclusion Unit, 2002), and explains an enduring correctional interest in the transition process from prison to the community. As is the case for employment and re-offending, extensive new evidence confirms that problems faced by released offenders, in relation to housing, family support, financial and other practical concerns, are associated with higher rates of re-imprisonment. Unsatisfactory living conditions (Home Office, 2001; Nilsson, 2003), homelessness (Metcalf & Culhane, 2004), and lack of social support (Niven & Stewart, 2005) have each been found to be associated with higher rates of reconviction.

Most comparable countries have systems in place to provide practical assistance and support to prisoners who are returning to the community. Evidence indicating whether this activity significantly improves offenders’ chances of “surviving” after release, and avoiding relapse into new offending, was fairly scarce before 1998. A few studies published since that time suggest however, that there can be value in this form of intervention. It should be kept in mind that, in many cases, offender interventions described as “reintegration” actually involve delivery of significant rehabilitation (substance abuse treatment, anger management, etc), and are more appropriately described as such. However, a few studies describing services which are consistent with our definition of reintegration (practical assistance and support...
provided to prisoners to help with their return to the community) have been published, some of which are described below.

- Participants in a US study received “comprehensive community-based aftercare services” that included assessing skills and interest for employment, job referral and placement services, and teaching basic job search skills. At a one year follow up, participants had spent more time in full-time jobs than non-participants, and rates of re-offending were “slightly lower” (Rossman & Roman, 2003).

- A US programme, the Maryland Re-entry Partnership Initiative (Roman et al, 2007) sought to “strengthen social networks, enhance social controls, and improve community service availability and accessibility. A follow-up study indicated a 5.5 percentage-point drop in the number of participants who were reconvicted for new crimes (72% vs. 77.6% for controls, p<.05)

- A UK study known as the “Swansea Community Chaplaincy Project” involved a process of identifying targets during imprisonment, addressing those targets through support services and networks, providing practical and emotional support throughout the process, and identifying appropriate outside agency assistance. The report on this project found “promising signs” of reductions in re-offending (Grayton et al, 2008).

Some reasonably large-scale studies have found less benefit from reintegrative support provisions. Participants in “Project Greenlight”, a New York-based initiative providing discharge planning and linking offenders to support services in the community, did not achieve significant reductions in recidivism (Wilson & Davis, 2006). A UK “Resettlement Pathfinder” initiative with short-term prisoners (provision of “help with welfare needs”) had no significant effect on one-year reconviction rates, when level of risk was controlled for (Lewis et al, 2007), although particular sub-groups participating in the initiative showed some positive results.

It is possible however that reintegrative support may be ineffective if delivered as a stand-alone form of intervention, but that provision of such supports following completion of other forms of rehabilitation may be of significant benefit. A small number of recent evaluations indicate clearly that “continuity of care” approaches have enhancing effects on outcomes (Bouffard & Bergeron, 2007; Lewis et al, 2007). This suggests that programmes undertaken in institutional settings need to be followed by a community phase after release. According to Petersilia (2004), the post-release phase needs also to be “intensive and cognitive-behavioural in orientation”.

Further evidence of value also comes from a recent local study centred on the quality of reintegrative planning with offenders (Willis & Grace, 2009). Child sex offenders released from a prison-based rehabilitation programme, and subsequently reconvicted, were found to have received lower-quality reintegration planning (in relation to accommodation, employment and social support) than a matched group of offenders who were not reconvicted.

Evidence of the effectiveness of parole management is also relevant to questions on the effectiveness of reintegrative services. Many countries have a form of parole whereby offenders are released from prison under the supervision of a Probation
Officer, who monitors the offender and assists him/her to secure accommodation, employment and other needs. At this stage it is unclear whether the reintegration support provided by Probation Officers has a positive influence on re-offending rates. A small number of studies have been published which indicate lower than expected rates of re-offending amongst parolees (Schlager & Robbins, 2008), although typically the difference is just a few percentage points. Several studies have found no difference in recidivism rates of paroled and comparable non-paroled offenders (Solomon et al, 2005). However, one study points to the conclusion that differences in the professionalism and engagement by Probation Officers can have differential impacts on the recidivism rates of parolees (Paparozzi & Gendreau, 2005).

The common failure to find differences with standard parole may reflect the fact that support or assistance being provided to parolees are at relatively low levels. Better outcomes are associated with fairly intensive rehabilitative interventions with parolees. Examples include the “Preventing Parolee Crime Programme” in California. This multi-dimensional approach involved drug treatment, placement with social services, and maths and literacy training. Participants had recidivism rates that were eight percentage points lower than non-participating parolees (44.8% vs. 52.8%; Zhang et al, 2006). Similarly, a very recent study (also in the US) examined the effect of a relatively intensive parole management, involving provision of substance abuse or anger management programmes, assistance with job placement or vocational training, and activation of family support. Parolees who received this kind of intensive parole management were rearrested, reconvicted and re-imprisoned at rates “significantly lower” than comparable offenders (Ostermann, 2009).

**Summary**

The current review adopts the term “target” to refer to those aspects of the offender’s personality, lifestyle or circumstances which, if effectively remedied in some way, lead to positive (reduced re-offending) outcomes. The term replaces the previous “criminogenic need” concept, which is no longer as widely accepted.

From an examination of published outcome studies, the following personal characteristics continue to show value as a focus for correctional intervention:

- anti-social attitudes and beliefs
- anti-social peer associations
- deviant sexual interests
- substance abuse and dependency
- poor self-management and problem-solving skills
- familial conflict and dysfunction
- education and employment related deficits.

A great deal of published research in the last decade has confirmed low self-control as being central to the propensity to commit crime. As such this construct is confirmed as having great importance as a focus for treatment effort.
At this stage it remains unclear whether violence propensity *per se* should be classified as a target, as recent evidence has produced equivocal findings. Violence appears multifaceted with a wide range of contributory causes and, on this basis, taking a broad therapeutic approach is advocated.

Prior to 1998 (the time around which the Department’s sentence management approach was being formulated), education and employment-related activity were seen as useful “time-fillers” for prisoners, but the evidence for their utility in reducing re-offending was relatively slight. However, in the last ten years a range of robust studies have accumulated showing positive outcomes achieved as a result of targeting offenders with educational and employment-related training.

Less compelling evidence has been produced to support the simple targeting of reintegrative concerns (e.g., ensuring that released prisoners’ accommodation, employment and social support issues were addressed), although this type of activity has been shown to be of benefit when it follows successful rehabilitation programme completion.
Section 3: Responsivity

State of Knowledge to 1998

The responsivity principle of offender rehabilitation requires that treatment programmes are delivered in a manner that is congruent with the abilities and “learning styles” of offenders (Andrews & Bonta, 2006). Responsivity has been differentiated into general and specific responsivity requirements. General responsivity refers to programme design elements, such as overall style of programme delivery, level of intensity, skills of facilitators, and programme “integrity” (adherence to prescribed standards of implementation and delivery). Specific responsivity refers to the need to adapt programme content and approach to ensure engagement of offenders of different ethnicity, intellectual ability, gender and motivation for change.

By 1998 a good deal less was known about these kinds of issues than is now known. Early attention seemed to focus mainly on the issue of offenders’ “learning style”, with the usual advice being that programme content should be styled and delivered to match a “concrete” thinking style if appropriate\(^6\). Further, the assumption was made, based on a small number of studies, that offenders could benefit from programmes only if they came with adequate levels of motivation for change.

How New Zealand Used Knowledge about Responsivity

The most significant expression of adherence to the responsivity principle here in New Zealand was the adoption of a cognitive-behavioural model for the design of core programmes. This decision rested on theoretically-based understanding of the nature of criminality (Andrews and Bonta, 1994), and the extensive research evidence supporting this style of approach.

Development of a comprehensive motivational assessment procedure was also undertaken in response to knowledge of responsivity principles. Programme referral rules were also specified, requiring offenders who were judged “pre-contemplative” (or unmotivated for change) to be excluded from programmes. Higher-risk but unmotivated offenders were targeted with interventions intended to have a motivational effect. Probation Officers were trained in use of interviewing techniques designed to motivate offenders towards changing offending behaviours.

With respect to programme design, a short motivation programme based on the CBT model was adopted, but programme intensity (i.e., number of sessions per week, number of weeks’ duration, etc) was relatively low. Facilitator skill for general rehabilitation programme delivery was not seen as particularly critical, resulting in the role being opened to interested Probation and Prison Officers, many of whom had no directly relevant qualifications or previous experience. Training and on-going practice supervision were less than intensive.

\(^6\) A concrete thinking style is characterised by a relative absence of conceptual-type thoughts.

This review discusses the range of responsivity needs relevant to offender rehabilitation, including both general and specific responsivity factors. These needs are categorised into four groups:

- factors relating to the programme design
- attention to offender specific factors, which include demographic variables and individual barriers to treatment
- the broader programme environment, including the setting, group environment, intensity, programme integrity and voluntariness
- the characteristics of the treatment staff, including skills, training and interpersonal style.

New Developments in Rehabilitative Programme Design

With respect to the mode of programme delivery, the “what works” literature continues to strongly endorse cognitive-behavioural approaches as optimal for effective offender rehabilitation. This approach places at the centre of programmes the modification of attitudes and beliefs, teaching pro-social problem-solving and interpersonal skills, and “relapse prevention” concepts - teaching offenders to arrange their lifestyles in a manner that reduces exposure to offending opportunities and temptations. CBT appears to be effective for most types of offenders, irrespective of age, gender, ethnicity or offence type (Andrews & Bonta, 2006; Landenberger & Lipsey, 2005; Salekin, 2002; Wilson et al, 2005).

Over the last decade however, developments have occurred especially in relation to programme approach, design and content, as well as tailoring programmes to the needs of specific offender sub-groups. The offender rehabilitation domain has seen a wide range of research-based developments which have expanded the suite of effective programmes outside of a purely risk-need-responsivity (RNR) framework. Programmes that target factors other than proven intervention targets (such as faith and culture) or that promote pro-social relationship behaviour (such as therapeutic communities) fall outside the RNR model as they are based on a distinct theory about what is required for people to desist from crime. In contrast, when RNR programmes are specifically tailored for offenders of particular ethnic or religious groups, the tailoring aspect of the programme is an endeavour to adhere to the principle of “responsivity”. The strength-based approach to offender rehabilitation can be viewed as a distinct theory, whereby crime is caused by people meeting their human needs through criminal offending. However, strength-based rehabilitation also functions as a responsivity-enhancing approach (Ward, 2009).

“Strength-based” approaches

The last decade has seen some vigorous debate in the published literature over the value of introducing “strengths-based” content and tone to correctional rehabilitation. Researchers and other writers with interest in this concept have suggested that the usual emphasis on risk and need is unhelpful, as it tends to communicate to both offender and clinician a pessimistic and potentially self-defeating preoccupation with failure (Maruna, 2001). Instead it is suggested that a more positive and hopeful
A chief proponent of this view is Dr Tony Ward at Victoria University (Wellington, NZ) whose “Good Lives Model” (GLM) has attracted international attention (Ward & Stewart, 2003). According to GLM, the central goal of correctional treatment is to equip offenders with the ability to lead satisfying and meaningful lives, a by-product of which will be reduced likelihood of their inflicting harm on others. Ward argues that human beings are predisposed to seek a number of primary “goods”, such as “achievement in work and play”, independence, “inner peace”, friendship and creativity. Achieving such goods enables human beings to function well, and lead productive, pro-social lifestyles. Treatment administered according to GLM principles would be tailored to the individual, incorporating considerations such as treatment readiness, health, and knowledge. Issues that might be considered “risk factors” would be viewed as impediments to an offender implementing their “good life plan” in a fulfilling and socially acceptable manner.

While the GLM proposes a new way of looking at offender rehabilitation, it is not suggested that it should replace empirically-validated CBT approaches. Rather, GLM is designed to extend and complement traditional risk-management treatment approaches that employ a CBT framework (Whitehead et al, 2007).

GLM principles have been embraced in a number of correctional agencies internationally (e.g., Victoria State Corrections in Australia). However, while generating a great deal of interest (and reaction), the GLM approach has yet to be properly evaluated (Whitehead et al, 2007). It can also be argued that the rhetoric of GLM rests on an artificial distinction between strengths-based, and currently-standard approaches to correctional rehabilitation. In reality the latter has always entailed a great deal of content directly aimed at supporting offenders to lead satisfying and rewarding lives.

Dialectical Behaviour Therapy (DBT)

CBT approaches have been successfully adapted to include a range of other treatment modalities derived from the broader psychotherapeutic literature. Many of these newer models include elements of positive psychology with its focus on factors that mitigate against dysfunctional thoughts, feelings and behaviours, and promote mental wellbeing (Wormith et al, 2007). DBT is one recent adaptation of the traditional CBT framework. While behaviours and cognitions remain paramount, DBT also includes an emphasis on such positive psychological factors as mindfulness (attention to the present moment), distress tolerance, emotion regulation, and interpersonal effectiveness skills (Berzins & Trestman, 2004). DBT was initially developed as a treatment for those with borderline personality disorder, and may hold particular promise for female offenders, given the high frequency of borderline personality disorder identified in female offender populations (Sorbello et al, 2002). However, its use has also extended to forensic patients within correctional-type settings. Empirical evidence on DBT is accumulating, suggesting that DBT may be particularly useful in reducing violent and aggressive behaviours in personality disordered offenders (Berzins & Trestman, 2004; Evershed et al, 2003). In New Zealand, DBT has been incorporated into the “Kowhiritanga” programme for women, and has informed other recent programme enhancements.
Moral Reconation Therapy (MRT)

Moral Reconation Therapy is a rehabilitative technique developed by Little and Robinson (1988), based on Kohlberg’s (1976) cognitive-developmental theory of maturation. Kohlberg’s theory posits that moral development progresses through stages, and that individuals with higher levels of moral development are less likely to choose behaviours that are harmful to others, and consequently are less likely to engage in criminal activity. Research generally supports the view that delinquents and offenders tend to be at “earlier” stages of reasoning and moral development (Arbuthnot & Gordon, 1988).

MRT is a structured programme that involves offenders taking part in a variety of exercises and tasks (including talking about happiness and identifying goals). One to two hour sessions are directed at groups of 10 to 15 offenders, and sessions take place two times per week. Since the first MRT publication in 1988, MRT has been implemented in a wide variety of settings including prisons, drug treatment programmes, parole, probation and halfway houses.

Evaluation studies of MRT have been largely positive. After attending MRT, both male and female offenders have shown reductions in recidivism (compared to the average recidivism rate for males and females (Burnette et al, 2005, Burnette, 2005). Juveniles who participated in MRT also re-offended less frequently than the average rate of recidivism for youth generally (Burnette et al, 2004). Three meta-analyses conducted by Little (2001; 2003; 2005) have also found that MRT has reduced recidivism by at least 50 percent when compared to expected recidivism or non-treated controls. A more recent report by Little (2006) evaluated 32 studies on prison based MRT and found treated offenders to have significantly lower reincarceration rates than controls: the reincarceration rate of MRT treated offenders was 25-35 percent lower than non-treated controls, at each year from 2 to 10 years post-release. The evidence being generated on MRT suggests that it may be a promising avenue to reduce offending behaviours.

Therapeutic Community

Therapeutic Community (TC) approaches in correctional settings have continued to generate positive outcomes over the last decade. TCs use an intensive, highly structured, pro-social environment generated within a residential community as the source of influence towards change. The setting is usually a residential unit that is entirely separate to the general correctional population. Residents are instrumentally involved in running the community and both staff and residents are called upon to interact in a manner that positively influences other participants’ perceptions, attitudes and behaviours. Many TCs use hierarchical structures, where progression is matched with increased demonstration of personal responsibility.

Many published studies of TCs are fraught with methodological limitations such as selection and attrition biases, poor outcome measures, lack of comparison groups and low statistical power (Welsh, 2007). Despite these methodological problems, a number of studies have concluded that TCs are successful at reducing recidivism in offenders who have substance abuse problems. Evaluations of TCs for drug and alcohol abusers in the United Kingdom and in America have shown that graduates
from TCs have significantly lower rates of reconviction than controls, and that treatment is associated with abstention from drug use (Martin & Player, 2000; Welsh, 2007, Lipton et al, 2002).

**Motivational interventions**

Research on addictive behaviours (drugs, alcohol, smoking, gambling, etc) has shown that interventions which simply encourage and motivate clients to cease engaging in the problem behaviour can be as effective as intensive therapeutic programmes (Luty, 2003). While correctional programmes typically include elements which are designed to encourage programme participation, the possibility that a programme could succeed simply by encouraging desistance from crime is an intriguing possibility. Here in New Zealand, Anstiss (2005) reported a brief motivational interviewing intervention involving just four one-hour sessions, employing motivational techniques such as problem recognition and decisional balances. The results indicated significant reductions in both reconvictions and re-imprisonment over a follow-up period of up to four years, compared to both matched controls receiving no treatment, but also those completing more intensive programmes. To date no further studies of this method with offenders have been reported, but it appears to have potential as a very cost-effective form of intervention.

**Faith-based approaches**

Proliferation of structured faith-based interventions with offenders has been a distinct feature of the correctional environment internationally over the last decade. These programmes typically involve Christian-based teaching, involvement in religious activities (prayer, Bible study, worship services), and mentoring by volunteers from local churches (Burnside et al, 2005). In institutional settings, many of these programmes also incorporate “community of change” concepts, which emphasise peer relationships, and mutual support and influence. Prison programmes also tend to have a post-release phase based around offenders’ involvement in a local Christian group and church-related activities.

Although variation exists in how supporters of faith-based programmes conceptualise the “curative” effect, in the main the mechanism of change is assumed to be the adoption by offenders of Christian values and moral code, with a resulting change in attitudes, motivations and behaviour. Long-term involvement in non-criminal and pro-social social networks (e.g., as a church member) is believed to be crucial in maintaining change.

A number of outcome evaluations of faith-based offender programmes have been published in the last ten years, and findings are summarised here.

- Over 200 prisoners who participated in Prison Fellowship programmes in New York State prisons were followed up for eight years after release. Comparisons were made with a control group individually matched according to age, race,
sentence length and initial security classification. This study found no significant differences between groups in rates of either re-arrest or reincarceration (Johnson, 2004).

- A smaller-scale study of a Texas prison faith-based programme ("Inner Change Freedom Initiative" or IFI) found, at two years post-release, that participants had a re-arrest rate that was half that of the comparison group (17.3% vs. 35%) and participants were re-incarcerated at a rate 60 percent lower (8% vs. 20.3%); however, a high drop-out rate meant that "graduates" constituted just 42 percent of all "starters" in the programme cohort (Johnson & Larson, 2003).

- A Christian-based therapeutic programme operating in four prisons in England and Wales, the Kainos Community Programme, was evaluated by tracking the post-programme performance of 84 participants. Once the influence of variables such as criminal histories was taken into account, the 12-month reconviction rate for participants was found to be within one to three percent points of the "expected rate" (difference not statistically significant; Burnside et al., 2001).

- An evaluation of Florida's Faith and Character Based Institutions (FCBI) indicated a statistically significant difference between the proportion of FCBI prisoners who were re-incarcerated, relative to a comparison group of male prisoners. The evaluators, acknowledging that the follow-up period was relatively short (six months post-release), described this finding simply as "cause for cautious optimism" (Reutter, 2008).

Evaluating the impacts of faith-based approaches presents some difficulties, particularly in relation to comparison samples. Offenders who participate in such programmes may not necessarily be representative of the wider offender population, and low rates of reconviction amongst faith programme graduates can therefore be simply a function of their relatively low risk status. Such programmes also tend to have high drop-out rates (as was the case in the IFI study above), which also affects the validity of outcome measurement. At this stage "the jury remains out" on the question of whether faith-based programmes can be effective in reducing recidivism.

**Approaches based on indigenous and minority culture**

The ethnicity and culture of participants are important considerations in programming due to the over-representation of indigenous and ethnic minority persons within many national correctional populations. The last ten years have also seen some development in programmes based on indigenous culture as a means of promoting change amongst offenders. In some ways analogous to faith-based approaches, these programmes encourage participants to embrace values, motivations and social commitments derived from the traditional indigenous culture of the offender group. There is an expectation that these values and motivations will be incompatible with a criminal lifestyle.

It has been noted that while ethnic minorities are generally over-represented in the prison population, they are often under-represented in those attending treatment (Patel and Lord, 2001). Patel and Lord interviewed ethnic minority offenders who did participate in treatment, and found that the majority (75%) believed that their needs were different to other group members. An even larger proportion (89%)
believed that programme facilitators lacked an understanding of ethnic minority offenders and their needs.

It is now generally accepted that treatment programmes should be adapted to cater for the cultural needs of offenders who participate. As such, culture represents an important responsivity issue within offender rehabilitation. Incorporating culturally-based concepts, imagery and activities into programme content is regarded as a way of both attracting minority-group participants into programmes, and ensuring that the programme engages and retains them.

A number of common characteristics can be identified from a review of culturally-enhanced interventions (Correctional Service Canada, 2008; Nathan, et al., 2003), including:

- a holistic philosophy that validates and integrates spiritual, emotional, cognitive, physical and wider social dimensions to functioning
- inclusion of culture-based activities such as language and traditional ceremonies, teachings, traditions and practices
- an emphasis on developing cultural identity as a foundation for a new (non-offending) lifestyle
- emphasis on interpersonal ties to family, community, tribal group, and reintegration back to these groups
- collaboration with community-based agencies and individuals such as tribal members and elders, and inclusion within the programme of culturally appropriate staff such as tribal elders.

A related development is the employment of consultants and other advisers from minority groups to provide advice on programme design and delivery, as well as to deliver programme content to participants. These practices are evident here in New Zealand (Department of Corrections, 2008b; 2008c), throughout Australia (e.g. Department for Correctional Services, 2008; NSW Department of Corrective Services, 2003), Canada (Correctional Service Canada, 2009), and the United Kingdom (Patel & Lord, 2001).

New Zealand has been one of the first countries to implement culture-based correctional initiatives, with the implementation of Māori and Pacific Focus Units in prisons, and Tikanga Māori courses for both prisoners and community-sentenced offenders.

Reports of a few examples in other countries have been located, although these tend mainly to be “mainstream” correctional programmes with an over-lay of cultural elements. Just one non-NZ example was found of programmes based solely on cultural principles, the Canadian “healing lodge” concept. A number of these exist across that country; some are run by the Corrections Service of Canada (CSC), while others are owned and operated by Aboriginal communities who contract to the CSC (Trevethan et al., 2002). At this stage no formal outcome data exists to determine whether these programmes are successful in reducing recidivism.

At this stage there are just a few studies which suggest that adoption of such principles can improve recidivism outcomes for minority group offenders. There is
however more extensive evidence for improved culture-related outcomes for participants (Correctional Service Canada, 2008; Nathan et al, 2003).

**Offender-specific factors**

**Sex offenders**

Over the last ten years there has been reaffirmation, that for sex offenders, the RNR principles of treatment are most effective at achieving reductions in sexual and general recidivism (Harkins & Beech, 2007; Hanson et al, 2009). It has been recognised that many of the variables commonly addressed in sex offender treatment have not been empirically related to sexual or violent recidivism (Hanson & Morton-Bourgon, 2004 & 2005). For this reason, it has been stressed that programmes should target dynamic factors empirically linked to recidivism such as low self control and a lack of meaningful relationships with adults (Hanson et al, 2009).

A number of changes to treatment programme design for child-sex offenders have also taken place over the last ten years. These have been based on significant developments in research-led understanding across several domains: the nature and etiology of such offending (Ward, 2003), offender typologies, and pathways that different types of offenders follow in the lead-up to committing their crimes (Ward & Siegert, 2005). Such work has had direct implications for the tailoring of treatment to child-sex offenders.

With respect to sub-types of child sex offenders, the following core dynamics have been identified by Ward (2003) as central to different types:

- intimacy deficit: these offenders have normal adult sexual preferences, but “resort” to a child substitute out of loneliness and cravings arising from an inability to form intimate relationships with adults
- emotion dysregulation: these offenders have problems with emotion recognition, fail to regulate their emotions, and lack coping strategies when in the grip of acute emotional states, with sexual acting-out used as a coping strategy
- deviant sexual interest: sometimes described as “pure” paedophiles, these offenders have a distinct preference for children as sexual partners, and idealise sexual relationships with children. Distorted beliefs about sexuality and children are common, such as the expectation that children would welcome, and benefit from the sexual interest of an adult
- anti-social – for some offenders, their inappropriate sexual behaviour is simply another manifestation of their general criminal lifestyles.

Developments have also occurred in relation to rape offenders. Building on the earlier typologies of rape offenders (Knight & Prentky, 1990), investigations have focused in particular on sub-types of rapists and how best to match these to treatment modalities. On the basis of findings from a comprehensive sex offender treatment programme, Beech et al (2005) argue that rapists can be influenced by treatment in different ways, and that some sub-types of rapists are more suited to particular types of treatment than others. For example, “sadistic” rapists (rapists for
whom images of torture or death are arousing) should not be subjected to empathy training, given that harm to the victim was part of their actual intent. Differentiating the treatment approach is also argued for with respect to “grievance-type” rapists (those motivated by a generalised anger against women) and sexually motivated offenders (opportunistic, anti-social offenders who tend to fantasise in advance of an offence).

Programmes specifically for rapists remain relatively uncommon, and in many locations rapists and child sex offenders are treated in the same rehabilitation programmes (Beech et al., 2005). Here in New Zealand, specific programmes for rapists were not initially prioritised because rapists appeared to have very low rates of sex offence recidivism (Wilson, 2006). More recent reconviction data and the availability of a risk measure (the ASRS) that can reliably identify higher risk offenders, has led to a revision of this view, which in turn prompted design and implementation of a pilot programme for rapists (Wilson, 2006). While still in its infancy, initial outcome indications are positive.

**Female offenders**

The question of whether intervention approaches should be adapted in order to better engage, retain and positively influence female offenders has been the subject of extensive writing and theorising. It has to be acknowledged that female offenders often receive programmes that were developed for male offenders (Covington & Bloom, 2007; Van Wormer & Kaplan, 2006). As Covington and Bloom state that, more so than for males, “the female offender’s life is shaped by her socio-economic status, her experience with trauma and substance abuse, and her relationships with partners, children, and family” (2007, p.14).

In general there is awareness that substance abuse, psychiatric difficulties and relationship and family problems are particularly widespread amongst female offenders (Dowden & Andrews, 1999; Blanchette, 2001). The tendency for many female offenders to display this specific constellation of needs has led to the argument that targeting these needs sequentially, and in isolation from each other, is less effective. Rather, an integrated approach that acknowledges their interrelated nature is preferred (Covington & Bloom, 2007; Sorbello et al., 2002).

There is now general support for the notion that, to ensure meaningfulness with participants, programmes directed to female offenders should acknowledge and appropriately respond to abuse and victimisation experiences (Moth & Hudson, 1999; Bryne & Howells, 2000, Sorbello et al, 2002). Victimisation means that many female offenders suffer from post-traumatic stress disorder (PTSD) (Burn & Howells, 2002). Although there are a variety of treatments for PTSD, few targeted treatments have been made available to the offender population (Heckman et al, 2007). Evaluations of corrections-based PTSD programmes contain major methodological weaknesses, so no firm conclusions can be reached about their effectiveness (Heckman et al, 2007).

High rates of abuse and victimisation amongst female offenders, typically committed by male perpetrators, has led to some researchers arguing in favour of female only treatment and correctional staff working with these individuals, although it is also
recognised that this is not always practical (Van Wormer & Kaplan, 2006). This has also led to awareness of the particular need for treatment environments for female offenders to be safe, consistent, and supportive (Covington and Bloom, 2007).

Others have emphasised the need for contact with children, families and significant others (Monster & Micucci, 2005). A “systems” treatment perspective is thought to be particularly relevant to female offenders, involving understanding of the broader networks within which the person lives, and considering the impact of relationships with others within these systems. An example is family therapy, which seeks to change individual behaviour through understanding (and promoting change within) family processes (Covington & Bloom, 2007). Covington and Bloom have also highlighted the unique value in strengths-based treatment approaches, as these are understood to promote competence and self-reliance, the sense of which is often low in female offenders.

Strong evidence has yet to be generated to demonstrate that targeting characteristics that are unique to female offenders can bring about reductions in re offending. Nevertheless, some jurisdictions have developed programmes specifically designed for women. In New Zealand the “Kowhiritanga” programme addresses standard offence-related targets, but specifically focuses on emotional and personal domain issues, particularly victimisation (Riley, 2005). This programme is yet to be evaluated. Correctional Services of Canada (CSC) have also developed programmes specific to women in the hope of improving both their relevance to presenting issues, and the level of engagement by female offenders (CSC, 2009). These programmes emphasise the following: substance abuse, survival of abuse and trauma, parenting and relationships between mother and child, education and employability, and social integration. In Australia, examples of female offender programmes exist, targeting issues such as low self esteem, “life choices”, stress management, parenting and communication, and skills (Howells, 2000).

Youth offenders

Developments in intervention targets for youth offenders have also emerged since 1998. While specific targets for youth, again, are not dissimilar to those of adults (for example attitudes and beliefs, violence propensity, substance abuse), reducing the influence of antisocial peers may have particular importance in working with youth (Dowden & Andrews, 1999; Andrews & Bonta, 2006). While many programmes delivered to high-risk youth offenders have generated reductions in recidivism, larger effects tend to be found with family and community-based programmes rather than institutional programmes (Lipsey & Wilson, 1998).

Some research suggests that CBT interventions are of greater benefit to adult offenders and are less effective with youth (Hinton et al, 2003). A growing evidential base instead supports interventions which involve other family members and persons within the offender’s broader social circle (Dowden & Andrews, 2003; Dowden & Andrews, 1999). An example is multi-systemic therapy (MST), an intensive community-based treatment that attempts to address “multiple determinants of serious antisocial behaviour in young offenders”. The MST approach seeks to engage, as far as practicable, relevant members of the offender’s family, peer group, school and neighbourhood. Intervention occurs in one or a
combination of these systems, with the therapist promoting behaviour change by mobilising positive influences from these sources to facilitate change. A range of variant youth offender programmes, all incorporating this "systemic" approach, have emerged (e.g., "multi-dimensional therapeutic foster care" and "functional family therapy"; Robertson, 2009).

A 2002 meta-analysis of MST outcome reports indicated that youth offenders were found to function better and offend less than offenders who attend alternative programmes (Curtis et al., 2004). Studies have continued to be published since then that largely attest to good outcomes from these programmes (Schaeffer & Borduin, 2005). A pilot of MST here in New Zealand with high-risk youth offenders (a joint venture between Corrections and CYF) was not successful, and was subsequently re-designed for delivery to younger and lower-risk adolescents. Inadequate therapist selection and training has been posited as an explanation for this outcome.

The typically restless, energetic and excitement-seeking disposition of many young offenders has also led some researchers to the conclusion in many treatment locations that programmes should incorporate physically exerting activity, and group sessions need to be shorter, and more behavioural in order to retain the attention of youthful participants. Also considered to be of particular importance in youth offender rehabilitation is the need for the treatment personnel to develop a positive emotional relationship with the offender (Day, 2005)

*Psychopathic offenders*

Accompanying a growing knowledge base concerning psychopathy has been a vigorous debate about whether high-risk psychopathic offenders can be successfully rehabilitated. This has extended to questioning whether it is in fact safe for such individuals to participate in programmes. Studies have been published suggesting that psychopathic offenders not only do not benefit from standard correctional treatment approaches (Abracen et al., 2008) but that programme participation merely afford psychopaths the opportunity to acquire new skills in manipulating and deceiving other people (DaSilva et al., 2004). As a result, correctional services in some countries have opted to bar psychopathic offenders from participating in programmes (Beech et al., 2005). In the United Kingdom, offenders that score above 30 on the Psychopathy Check List–Revised (a tool developed to measure an offender’s degree of psychopathy) are not permitted to attend sex offender treatment, based on the conclusion that they cannot derive benefit from such programmes. As high risk offenders often produce high scores on the PCL-R, it would seem excluding these offenders is synonymous to deciding not to treat high risk offenders.

More recent research has tentatively pointed to the opposite conclusion (Looman et al., 2005a). High-intensity programmes have been demonstrated as having a positive effect on re-offending among psychopathic offenders (Caldwell et al., 2006; Looman et al., 2005). CBT remains the most well validated approach to rehabilitation with psychopathic offenders (Salekin, 2002), while appropriate staff characteristics and the use of techniques to enhance motivation and engagement also remain important. In New Zealand, the Violent Prevention Unit was found to reduce general recidivism, and scores on the PCL-R did not predict outcome. This suggested that
psychopaths can respond as well to treatment as do other offenders (Polaschek, 2009). A “High Risk Personality” programme has also been developed in New Zealand and is currently operational. This programme is also providing treatment to psychopathic offenders with early indications of positive impacts.

Caldwell et al (2006) evaluated a treatment programme for youth offenders with high levels of psychopathic traits. These authors compared a standard youth treatment approach to a more specialised programme. Both programmes involved a cognitive-behavioural orientation, were conducted in institutional settings, with participants mandated to the programme. The specialised programme was more intensive, and had a greater ratio of treatment staff to offenders. Caldwell et al also note a difference in philosophy between the two programmes. While the standard programme employed a more traditional philosophy of sanctioning and accountability, the specialised programme sought to weaken the individual offender’s antagonism towards conventional societal agencies and expectations, and to promote pro-social sentiments. The combination of factors employed in this specialised treatment programme resulted in a significant reduction in violent re-offending, as well as reductions in the seriousness of, and time elapsed to, new re-offending.

Additional responsivity considerations apply to this category of offender also. It is suggested that staff attitudes toward individuals with psychopathic traits may alter their willingness to engage in treatment. Ross et al (2008) point out that the label of psychopathy applied to an offender may result in therapist biases such as viewing negative behaviours as intentional and positive behaviours as deceptive, resulting in problems for developing an appropriate therapeutic relationship. Thus, staff need to be aware of their own preconceptions and biases, and how these affect their approach to psychopathic offenders.

Overall, research suggests that treatment for individuals with psychopathic traits may be successful, and highlight that those programmes with a higher intensity and greater staffing resources are well placed to achieve this goal.

*Offenders with cognitive deficits*

Most offender treatment programmes involve the teaching of concepts, ideas and principles of thought and behaviour. As such, participation requires a certain level of cognitive competency from offenders. It is often suggested that offenders with intellectual deficits (e.g., IQ lower than 85, or one standard deviation below the mean) are unable to benefit from standard treatment approaches. Including offenders with IQs across the range in a single programme may contribute to feelings of inadequacy among low IQ offenders, and negatively affect motivation and group cohesion (Looman et al, 2005).

More recent research supports the value of offering offenders with low intellectual functioning alternative treatment programmes that are suitable to their level of cognitive ability (Hubbard, 2007). Offenders with low IQs require highly structured, concrete and repetitive treatment, with a stronger behavioural than cognitive focus (Andrews & Bonta, 2006). Managing offenders with marked differences in intellectual functioning into different treatment groups may enable therapists to
optimally tailor therapy to their clients needs. In New Zealand, programmes such as the Te Piriti sexual offender programme have been adapted for offenders with lower levels of functioning.

In addition to intelligence, other cognitive factors influence treatment responsivity. Histories of head injury are common in offenders and often lead to cognitive deficits, Head injuries are also associated with poor treatment outcomes (Fishbein et al, 2009). Many offenders without known histories of head injury also have substantial neuropsychological deficits (Baumbach, 2002). Neuropsychological deficits, whether a result of head injury or otherwise, often manifest in outcomes such as low self control, poor planning skills, and insensitivity to outcomes (Fishbein et al, 2009). Deficits in these functions are associated with poorer treatment performance and a greater level of treatment non-completion.

Programmes for individuals with neuropsychological deficits need to specifically address these deficits, and encouraging offenders to “slow down and think” may be beneficial for offenders showing low levels of self control and executive function deficits. Fishbein et al also suggest breaking complex cognitive therapy down into more manageable components so the information can be integrated into an offender’s processing more easily. Thorough assessment may also enable identification of factors that enhance or reduce certain aspects of an individual’s functioning, further informing treatment planning (Baumbach, 2002).

Programme Environment

Custodial vs. community

Offender rehabilitation programmes have been run for decades both within custodial institutions and in community settings. Prior to 1998 the general consensus from research was that community-based programmes generated better outcomes than custodial programmes. Recent reviews and meta-analyses have tended to confirm this view (Andrews & Bonta, 2006; Parhar et al, 2008, Tong & Farrington, 2006), with community programmes generating effect sizes approximately double those of institutional programmes.

However, it remains possible that these results simply reflect differences in custodial vs. community offender populations. This was the conclusion reached by Killias and Villetaz (2008), who point out that the average risk score of the prison population is significantly higher than for community offenders, which means that gains through treatment programmes may be harder to achieve. Other researchers suggest that high rates of treatment drop-out in the community (or failure to commence) mean that programme graduates, upon whose performance a community programme is judged, are skewed towards more cooperative and motivated offenders (Hollin et al, 2008). Certainly, one undoubted advantage of custodial programmes is greater retention of participants.
Group environment

The majority of treatment in offender rehabilitation takes place in a group format. In addition to cost-effectiveness arguments, members of programme groups have potential to act as “change agents” for one another, in both supporting and challenging each other as the programme progresses (Ross et al., 2008). Research that has examined the dynamics of correctional group programmes has pointed to a number of important conclusions. These include the following:

- higher levels of “cohesiveness” within sex offender treatment groups were found to be associated with better outcomes (Beech & Hamilton-Giachritsis, 2005)
- group facilitators who display empathy, respect, and supportive challenge have been found to be more effective in promoting a positive group environment (Marshall et al., 2003)
- in custodial settings, programme impacts are enhanced by separation of treatment groups from the general prison environment, presumably through the effect of having all staff and participants acting in support of treatment goals, encouraging and rewarding treatment related progress, and building positive relationships (Ross et al., 2008)
- encouraging participants to spend time in discussion with other group members, outside of group time, enhances the engagement of offenders in the treatment process (Frost & Connolly, 2004)

An additional dimension of treatment groups is composition of the participants. Research has to date focused exclusively on sexual offenders, given the continuing debate as to whether offenders with adult and child victims are best treated together, or separately. Recent findings indicate that programmes where types of offenders participate together are no less effective than those which include just one type (Beech & Hamilton-Giachritsis, 2005; Harkins & Beech, 2008). However, it is suggested that facilitators running mixed groups need to emphasise the similarities between different types of offenders, in order to promote and maintain group cohesion. This is the approach currently being used in New Zealand’s Medium Intensity Rehabilitative Programme and the Special Treatment Unit Rehabilitative Programme.

Treatment intensity

A number of studies have examined the issue of programme intensity, and provide some guidance on the critical issue of how long a programme needs to be in order to reliably generate positive effects. An important consideration in determining appropriate treatment length is the risk profile of intended participants. Overall, the conclusion is that intensity should vary with the risk level of participants, so that higher-risk offenders receive a greater “dosage” of treatment than those offenders of low or moderate risk status. A key study is Bourgon and Armstrong (2005), who allocated offenders to programmes of different length, based on their risk level. Findings demonstrated that recidivism rates were lowest when intensity of the treatment to which individuals were allocated was based upon level of risk. Those offenders of moderate risk were most successful after attending a five-week/100 contact hours programme, moderate-high risk offenders benefited equally from a 10
week/200 hours or 15-week/300 hours programme, while very high risk individuals benefited most from the 15-week/300 hour programme. These levels of treatment match reasonably closely to the dosage currently offered to offenders in the rehabilitative programmes provided to New Zealand offenders. Bourgon and Armstrong (2005) also point out that higher-risk offenders have more personal problems and issues that must be addressed in treatment, and as such longer programmes provide more scope to target these factors.

Similar findings demonstrating the relationship between programme intensity, participant risk level and treatment effect have been produced by Bonta et al., (2000), Palmer et al. (2007), Palmer et al. (2009) and Hollin et al. (2008). The latter demonstrated that relatively short programmes of between 40 and 75 hours were capable of generating positive effects, but only with moderate-risk offenders.

One important evaluation suggests that programmes can fail through being too intensive. The California Sexual Offender Treatment Evaluation Program (SOTEP) required participants to engage in 40 hours of programme activity each week for up to two years, with a further 12–24 months in “aftercare”. Despite this intensity, the evaluation found no significant differences in reconviction or re-imprisonment rates between treatment and comparison groups. The intensity of the programme has been speculated as a possible cause of this outcome, with some suggesting that it inflated offenders’ self-perceptions of being at a very high risk of re-offending, resulting in a sense of powerlessness to remain offence-free (Looman et al., 2005). Other possible reasons for the programme’s apparent failure have also been suggested, such as an overly prescriptive approach that was rigidly adhered to, even if the individual characteristics of offenders suggested a need for adaptation (Marshall, 2009).

Also relevant to programme intensity effects is the extent to which an individual can miss sessions without compromising a programme’s effectiveness. Based on a range of outcome studies, Andrews and Dowden (2005) recommend that attendance must be above the 80 percent mark for a participant to be considered as having received an adequate “dose” of treatment.

Programme integrity

Programme integrity refers to the extent to which a programme is implemented and delivered in accordance with the ways intended by theory and design. Programmes with high integrity are implemented consistently despite being run in different locations and settings, with different types of offenders, and by different staff. Adequate programme integrity means that facilitators do not “cut corners” by omitting parts of the programme content, do not introduce new elements that are not part of the original design, or deliver the programme in a manner that is inconsistent with the intended approach (e.g., adopt a classroom-style manner when the intention is an interactive, group-learning approach). A balance does have to be achieved however between maintaining a high degree of compliance with the programme manual, and adhering to the responsivity needs of the participants. As responsivity issues and offender engagement are more problematic in high risk offenders, programmes for high risk offenders are likely to require more flexibility in terms of adherence to manuals.
Andrews and Dowden (2005) have written extensively on the topic of programme integrity, and argue that the failure of correctional administrators to pay sufficient attention to programme integrity probably explains most instances of poor outcomes. They have developed a checklist against which individual programmes can be assessed to measure integrity. Key factors related to strong programme integrity include the following:

- the programme is based on a coherent model or theory of criminal behaviour
- there are written manuals detailing programme content and procedures
- staff are selected on the basis of desirable interpersonal skills such as interpersonal warmth, interest and understanding
- staff are adequately trained in delivery methods suitable for the specific programme they are implementing
- offenders’ progress in the programme, and the way staff deliver the programme, are monitored and assessed
- staff receive professional supervision from a skilled senior who is thoroughly familiar with that particular programme
- participants complete an adequate proportion of the programme before exit (specifically, exposure to at least 80% of programme content).

Andrews and Dowden (2005) believe their research indicates that programmes with high integrity (according to the above criteria) will reliably generate effect sizes that are double those of programmes assessed as low on programme integrity.

Integrity issues are understood to explain the troubling phenomenon experienced in several countries, including New Zealand, where programmes are widely implemented across a correctional system, only to deliver outcomes that fall well short of those achieved by small-scale pilots or the expectation generated by international research (Cann et al, 2003; Hollin et al, 2008). Use of inexperienced and inadequately trained staff, non-availability of expert supervisors, and high rates of participant drop-out/non-completion are often apparent in such instances, and are likely to explain such findings.

As noted previously, research on educational outcomes (Alton-Lee, 2003) strongly suggests that educational services to offenders also needs to be of a high standard, both in terms of curriculum as well as in terms of competent delivery, in order to achieve positive outcomes.

**Mandatory vs. voluntary participation**

An issue that arises frequently in offender rehabilitation is whether required attendance at a treatment programme (for example, as part of the sentence, or as a condition of parole) can result in positive outcomes. It is often assumed that mandated participation may produce compliance, but that without “intrinsic” motivation, long term behaviour change cannot occur (Deci & Ryan, 2000). Recently, Parhar et al (2008) conducted a review of treatment programmes attended by offenders under differing levels of coercion. They concluded that, overall, the more voluntary an offender’s participation was, the more beneficial treatment appeared to be.
However, it is now generally accepted that mandated offenders can – and, more often than not, do – benefit from rehabilitation. It appears that intrinsic motivation, and internalisation of treatment goals, can develop as offenders progress through a programme. Researchers recommend strategies that enhance intrinsic motivation which they claim lead to less perceived coercion, and better treatment outcomes (Day et al, 2004). Such strategies include motivational interviewing, which includes “strengthening ambivalence”, problem recognition and “decisional balance”.

Day et al also note that subjective feelings of being coerced are influenced by how aversive an individual finds the programme experience: individuals who find participation an unpleasant experience are more likely to feel “forced”, and thus more likely to respond negatively. This can be countered by ensuring candidates understand how treatment works, what the programme involves, and by providing an opportunity to discuss programme elements that may be uncomfortable (but necessary).

In addition to having motivation to change, research points to a need for offenders to believe in their ability to succeed at changing their behaviour (Chambers et al, 2008), a concept known as self-efficacy. Individuals with low self-efficacy will feel overwhelmed with treatment and feel unable to implement the strategies taught due to their own sense of incapability (Chambers et al, 2008). Techniques that foster self-efficacy for treatment related changes are likely to be beneficial in rehabilitation for those offenders (Ward et al, 2006).

**Staff Characteristics**

**Facilitator style**

The importance of facilitator characteristics is sometimes overlooked in offender rehabilitation. Although these characteristics have been emphasised in the broader therapeutic literature for many years, it is only recently that attention has been paid to the role of therapist characteristics and style in offender rehabilitation (Drapeau, 2005). Confrontational styles have often been popular in offender rehabilitation and treatment for substance abuse (Serran et al, 2003). Recent research has disputed the use of a confrontational approach, suggesting that such a style is almost always harmful to the therapeutic process (Drapeau, 2005; Marshall, Serran et al, 2003). A therapeutic style that involves empathy, respect, and supportively challenging problematic ideas and behaviours is most effective (Marshall et al, 2002). Not only do these factors help to build an effective therapeutic relationship, but they also contribute to a cohesive group environment (Marshall, Fernandez et al, 2003).

In a review of the literature up to 2003, Marshall and his colleagues identified a range of facilitator characteristics found to be associated with positive change in offenders (Marshall, Fernandez et al, 2003). These were:

- interpersonal warmth: displaying acceptance, care and support
- genuineness: an honest and interested manner, confidence, and being comfortable with oneself
- a general respectfulness and empathic concern towards others
• active engagement in programme sessions, encouraging participation and completion of programme tasks
• modelling and encouraging appropriate emotional responses
• a moderate amount of self-disclosure
• open-ended questioning
• directiveness in providing structure and direction for participants – being clear about the need for, and value of change
• flexibility in being able to alter approaches to suit different participants
• “rewardingness” – reinforcement and encouragement for steps in the right direction
• use of humour.

Subsequent research has confirmed many of these factors as central to successful rehabilitation, particularly facilitator confidence, competence and persuasiveness (Drapeau, 2005).

Thus the preferred approach is one in which the facilitator views participants as “clients in need of support”, rather than “offenders in need of punishment” (Nelson et al, 2002). Participants in correctional rehabilitation have been shown to be strongly influenced by the characteristics of facilitators, and on the relationship between themselves and facilitators. Positive perceptions of each increase offenders’ motivation to engage in treatment and their estimate of the likelihood of success (Drapeau, 2005).

Here in New Zealand a study is currently underway to validate an instrument designed to assess the strength of positive therapist variables. Use of this instrument (Facilitator Skills Integrity Measure or FSIM) will encourage better therapist understanding of how to develop a therapeutic alliance, as well as provide evidence for the relationship between good therapist skills and positive programme outcomes.

Staff biases will also alter how successful the therapeutic relationship will be. As noted already, in response to the label of psychopathy, staff may be inclined to view negative behaviours as intentional and positive behaviours as deceptive (Ross et al, 2008). These assumptions may result in negative reactions that reinforce offenders’ antisocial characteristics, or validate their unhelpful beliefs about other people or themselves. Staff engaged in delivering offender rehabilitation therefore need to develop awareness of their own biases and preconceptions. Distinguishing between the individual, and the acts they have committed, is important for both the offender and the therapist, in facilitating change (Serran et al, 2003).

The research reviewed above relates to treatment programmes for offending behaviour. However, there is evidence that similar therapist style and characteristics are also beneficial in education and vocational training programmes. Specifically, Callan and Gardner (2005) found that when offenders perceived staff as supportive, respectful, flexible, rewarding and knowledgeable it contributed to the success of educational and vocational programmes.
Staff training and education

Although it is desirable that individuals teaching programmes are trained in clinical psychology, it is generally accepted now that other professional backgrounds are acceptable. However, careful selection followed by extensive training is required of all staff, to ensure that programmes are implemented in an effective and engaging manner (Marshall et al, 2002). Further, it is widely accepted that programme staff require regular clinical supervision from an experienced and competent practitioner (Andrews & Dowden, 2005).

Summary

“Target” refers to the specific focus for an intervention; responsivity refers to the manner or style in which an intervention is delivered. Recent research largely confirms much of what was already accepted ten years ago, but some new developments have arisen.

Programme design

Cognitive-behavioural treatment (CBT), involving techniques such as cognitive restructuring and social skills training, remains a “treatment of choice” in the correctional setting. However, the following theoretical approaches to treatment (some of which also incorporate CBT techniques) are also showing considerable promise:

- purely motivational interventions
- Dialectic Behavioural Therapy
- Moral Reconciliation Therapy
- therapeutic community approaches
- indigenous culture-based services.

Faith-based interventions with offenders have expanded rapidly in many countries over the last ten years. However, at this point there is no conclusive evidence that such approaches can be effective.

Offender-specific factors

Offending committed by different sub-groups is now better understood as having different etiologies and offence pathways. Consequently, targeting of characteristics that are specific to such sub-groups is supported. This research has had particular implications for the tailoring of treatment content directed at child-sex offenders and rapists. It is also recognised that the valid targets identified above are also effective targets in youth and female offenders. In relation to the latter sub-types of offenders, psychiatric difficulties, relationship and family issues and histories of victimisation have particular relevance for women. For youth, reducing the influence of anti-social peers, and engaging family and wider social network personnel as influences of change have strong validity.
Programme Environment

With respect to the style of delivery, achieving positive outcomes means that correctional interventions need to conform to the following principles:

- match the intensity of the programme or service (duration, number of sessions, amount of direct contact with programme personnel) to the risk profile of the offender
- have a high degree of integrity, including:
  - basing the programme on a coherent theory of criminal behaviour
  - having manuals detailing content and procedures
  - having appropriately selected staff
  - monitoring the offender’s progress and monitoring the staff delivering the programme
  - high levels of support for staff
  - ensuring a high proportion of participants complete the programme
- be congruent with the cultural backgrounds of participants (use of language, concepts, imagery, etc)
- be tailored to suit the specific learning styles of participants (e.g., an interactive and multi-dimensional approach to youth treatment, and taking a structured, repetitive behavioural approach for offenders with lower intellectual functioning)
- where programmes are delivered in an institutional setting, include an “aftercare” phase in the community.

Intervention programmes have proven particularly effective when delivered in a group setting. Evidence suggests that programmes may be more effective when delivered to offenders in the community rather than custodial environments, however this could reflect difference in the community and custodial populations. Programmes in which offenders are mandated to attend have been shown to achieve positive outcomes.

Staff characteristics

The following staff characteristics have been associated with good outcomes in correctional rehabilitation programmes:

- interpersonal manners characterised by empathy, respect, warmth, confidence and persuasiveness
- staff members who are aware of their own biases and preconceptions
- qualifications and training in a relevant professional discipline such as clinical psychology.
Conclusions

Ten years ago the Department adopted a new and (at the time) innovative set of principles and procedures to underpin and inform its rehabilitative objective. The goal was to achieve best practice in the delivery of offender rehabilitation, in order to achieve the greatest possible gains in terms of reducing re-offending.

This review has endeavoured to consider the accumulated research evidence of the last ten years, to determine whether the major principles of the Department’s approach remain sound, and to identify opportunities for improvements, and any need for changes.

Main findings

Offender rehabilitation continues to be a very active area of research and reporting of findings. A very large volume of publications was identified as relevant to the current review. The main findings are as follows:

- the effectiveness of correctional rehabilitation continues to be confirmed through a wealth of published outcome studies
- offender risk assessment remains both a valid and valuable procedure in supporting good offender management; a range of new risk assessment tools allows for better targeting of offenders with services
- psychologically-based programmes continue to demonstrate robust outcomes in offender rehabilitation
- good outcomes are being widely achieved through educational and employment training, and the provision of education and employment in conjunction with other forms of correctional rehabilitation is likely to bring about the best results
- reintegrative services (social supports to released prisoners) can also improve outcomes for offenders who have participated in other forms of rehabilitation, but these on their own do not appear to be effective
- further evidence is required to validate the impacts of culture and faith-based services
- while poor programme outcomes continue to be reported, this is usually a result of inadequacies in how services are delivered; of particular importance is competence and skill in correctional rehabilitation facilitators.

Implications for the Department

In the main, staff involved in rehabilitation design for this Department have remained abreast of the research literature traversed by this review; in many cases these personnel have actually contributed to the developing international understanding of such issues. This means there is no need for wholesale changes to the current approach, or need to fundamentally alter systems, services or policies. Perhaps the most important change is greater efforts to adhere to the general principle of comprehensiveness in rehabilitation, seeking to improve functioning across all areas – psychological, educational, employment and social circumstances.
The primary conclusion to be drawn is that the core principles of the “what works” literature remain sound as a basis for effective offender rehabilitation. However, success in rehabilitation is by no means a matter of adhering to a simple formula, and New Zealand is not alone in experiencing occasions of disappointing outcomes from its programmes and services. However, the research literature continues to point to key principles, adherence to which increases the likelihood that successful outcomes will in fact be achieved.
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